



NATIONAL STOVES & FURNACES
EXCELSIOR
STOVE & MFG.
COMPANY

Office & Foundry QUINCY, ILL.

Branches OKLAHOMA CITY, OKLA., ST. PAUL, MINN., PARIS, TEX.







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CATALOGUE No. 35
1922 - 1923



EXCELSIOR STOVE & MFG. CO.

OPERATORS LARGEST STOVE AND
FURNACE PLANT IN THE WEST

MAKERS OF



MAIN OFFICE AND FOUNDRY
510 to 618 South Front Street
QUINCY, ILLINOIS, U.S.A.

Branches
OKLAHOMA CITY, OKLA. - PARIS, TEX. - ST. PAUL, MINN.

*All prices in this cat-
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*This catalogue
supersedes all
former issues*

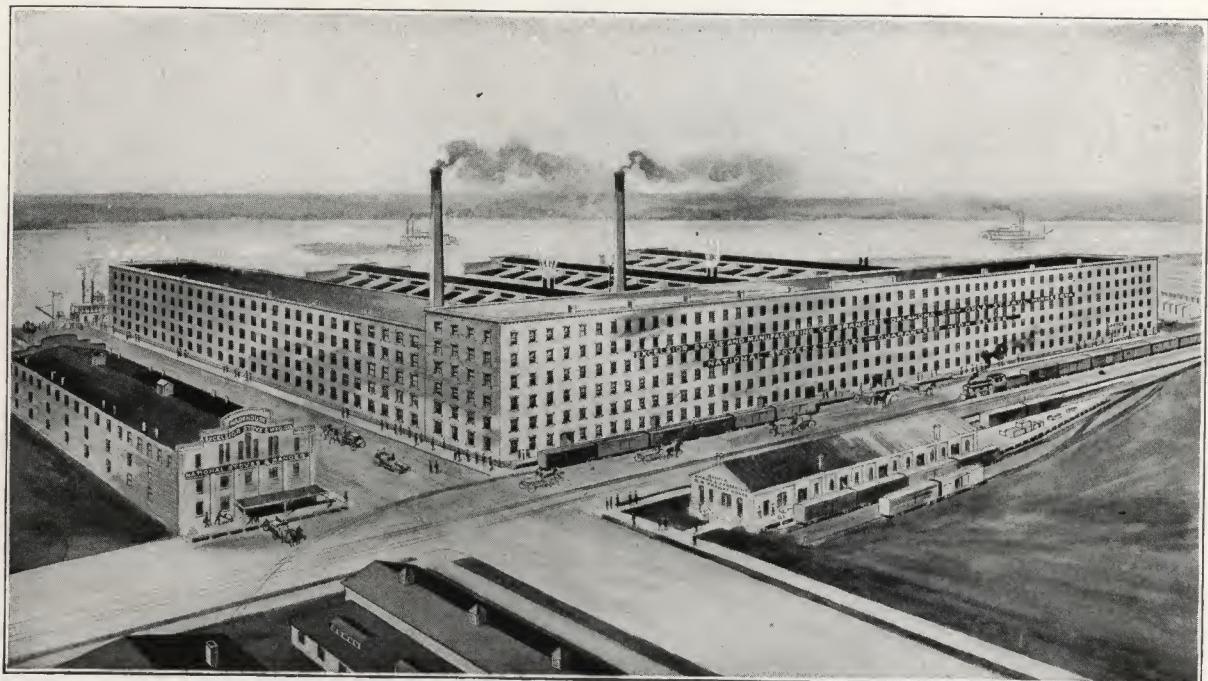
Evolution of a Stove Plant



EXCELSIOR STOVE & MANUFACTURING CO.

1890

Razed March, 1911



EXCELSIOR STOVE & MANUFACTURING CO.

1922

Largest Stove and Furnace Plant in the West



SOUTHWESTERN BRANCH
Walnut and California Avenues, Oklahoma City, Okla.



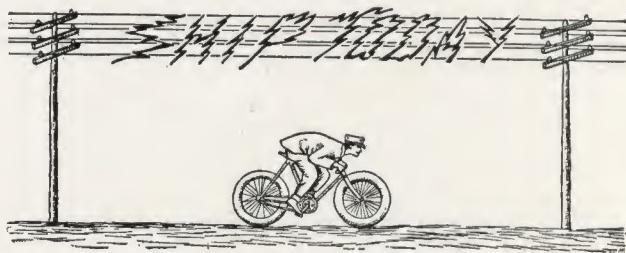
NORTHWESTERN BRANCH
University and Raymond Avenues, St. Paul, Minn.



TEXAS BRANCH
Bonham and North 12th Streets, Paris, Texas



Excelsior Stove & Manufacturing Company



Telegraph Code

Business Phrases in Frequent Use

	Code Word		Code Word
Ship by freight at once.....	Adage	Change our order to read.....	Adaptable
Ship by boat at once.....	Adamant	Quote by wire on the following.....	Adaptation
Ship by express at once.....	Adamic	Quote by mail on the following.....	Adder
Ship and follow with tracer.....	Adhesion	Trace by wire our shipment.....	Adherent
Add to our order.....	Adapt	For shipment with other goods deliver to.....	Addict

Express Code

Code Word
Ship at once by American Railway Express.. Advent

Railroads

	Code Word		Code Word
Via Atchison, Topeka & Santa Fe.....	Addle	Via Missouri, Kansas & Texas.....	Admix
Via Baltimore & Ohio.....	Adduce	Via Michigan Central.....	Admonish
Via Chicago, Burlington & Quincy.....	Adhere	Via N. Y. Central Lines.....	Admit
Via Chicago, Rock Island & Pacific.....	Adopter	Via Northern Pacific.....	Ado
Via Chicago, Milwaukee & St. Paul.....	Adieu	Via Pennsylvania Lines.....	Adoption
Via Chicago & Northwestern.....	Adit	Via Quincy, Omaha & Kansas City.....	Adopt
Via Chicago & Alton.....	Adjoin	Via St. Louis, Keokuk & Northwestern.....	Adorable
Via Great Northern.....	Adjudge	Via St. Louis & Southwestern.....	Adore
Via Hannibal & St. Joseph.....	Adjust	Via St. Louis, Iron Mountain & Southern.....	Adrift
Via Illinois Central.....	Adjutor	Via St. Louis & San Francisco.....	Advisor
Via International & Great Northern.....	Advocate	Via Union Pacific.....	Adroit
Via Kansas City Southern.....	Admire	Via Wabash.....	Adry
Via Missouri Pacific	Admittable	Via Wisconsin Central.....	Adult

Quincy, Illinois, Shipping Facilities

The geographical position of Quincy is central of the United States. It is located on the dividing line of the Eastern and Western classification of freight rates, thereby avoiding payment of two classifications on any shipment. It is a division point of several trunk line railroads, which radiate to all directions. Located on the Mississippi River, Quincy enjoys the "Water Rate" of freight, which is lowest. The railroad freight time to the various cities is as follows:

Buffalo, N. Y.....	32 Hours	Memphis, Tenn.....	22 Hours
Chicago, Ill.....	15 Hours	Milwaukee, Wis.....	20 Hours
Columbus, Ohio.....	25 Hours	New Orleans, La.....	65 Hours
Dallas, Texas.....	48 Hours	Oklahoma City, Okla.....	26 Hours
Denver, Colo.....	63 Hours	Omaha, Neb.....	24 Hours
Des Moines, Iowa.....	18 Hours	Sedalia, Mo.....	14 Hours
Detroit, Mich.....	27 Hours	Sioux City, Iowa.....	29 Hours
Grand Rapids, Mich.....	26 Hours	St. Joseph, Mo.....	17 Hours
Houston, Texas.....	60 Hours	St. Louis, Mo.....	10 Hours
Indianapolis, Ind.....	24 Hours	St. Paul, Minn.....	38 Hours
Kansas City, Mo.....	17 Hours	Toledo, Ohio.....	27 Hours
Little Rock, Ark.....	24 Hours	Wichita, Kan.....	28 Hours

National Stoves, Ranges and Furnaces



Prices and Terms

We invite correspondence with reference to prices, and to dealers only will quote our best discount from list prices, which will be as low as any other manufacturer on similar goods, quality considered.

Our prices are subject to change without notice.

Our terms are net cash, unless an agreement for specified time is made.

On C. O. D. orders we require a deposit of one-half the amount of bill, or an agent's guarantee of charges both ways on the goods, together with Chicago exchange for one-fourth of the amount of the order. Orders for \$5.00 and under must be accompanied with full amount of order.

We render statement of account to all customers from time to time, and, in cases where time has been given, balance must be settled by note, which will accompany statement.

Payments must be made in funds which are par at Quincy—When remittance is draft the same should be drawn on New York, Chicago or St. Louis; otherwise there will be an expense for collection and exchange, and enough must be added to cover the same, say thirty-five (35) cents for each one hundred dollars or fraction thereof. If remittance is by express the charges must be prepaid.

Claims for errors must be made on receipt of goods, and will not be allowed unless made within ten days from date of invoice.

All articles in this catalogue subject to a special discount except those articles marked net.

All cook stoves will be shipped without hollowware unless the ware is specially ordered.

Freight and Breakage

Unless otherwise ordered, we make all shipments at buyer's risk under the releases demanded by transportation companies, thus securing the benefits of released rates of freight.

We do not insure safe delivery of goods—Our responsibility ceases when shipments are received for in good order by boats, railroads and express companies, but we shall be pleased to assist customers in collection of overcharges from carriers (in order to do this we must have original expense bill promptly), or in tracing and hurrying forward goods which are delayed.

It must be distinctly understood that we do not, in any case, guarantee against breakage in transit.

Transportation companies will not entertain any claims for breakage unless goods have been accepted and received for. When this is done have your agent note on your expense bill the amount of damage, send it to us, and we will enter claim for you, and use our best effort to secure a prompt settlement. This will also apply to overcharge in freight; therefore, do not make any deductions for freight or breakage in your remittances, as we will not allow them.

The above terms are based on principles of fairness, and are in accord with general mercantile usage. They are not subject to abrogation or change by salesmen.

Directions for Setting up Stoves

Chimney—The first essential in setting up a range or cook stove is to examine the chimney and see that it has sufficient flue space and is of proper height. It is the chimney alone that furnishes the draft, and not the stove (as many suppose), and it must therefore be of good size and clear of all obstruction in order to furnish draft enough to operate stoves perfectly.

A new or green chimney will never have a perfect draft. It will not draw perfectly until it is thoroughly dry.

Pipe—Use as little pipe and as few elbows as possible. See that it fits tightly together, and into the chimney and onto the collar of the stove properly. See that it is not pushed into elbows or chimney too far.

Always have pipe and opening into chimney full size of collar on stove.

Do not set two stoves to same flue, or use a T-joint.

Stove—See that all the flues are open and clear.

See that the damper and flue stops are in place and closed tightly, being very sure that one back of the ash pan is tight.

Be sure you know how the dampers operate; that they may not be open when you think they are closed, and bear in mind that almost all stoves having reservoirs have two dampers, both of which must be properly turned to bake.

Directions for Operating

Cover oven top with ashes and fill reservoir before starting fire. Heat up slowly first time. Do not fill fire box above the top of the fire linings.

Shake grate often and keep free of cinders and ashes.

Do not let lower front door stand open. You get enough draft through the draft register.

In baking keep the register in feed door closed. The air to go around oven should pass through the fire and become thoroughly heated.

Do not run stove with damper down; you use too much fuel and burn stove out too fast.

Do not set leaky vessels or spill cold water on stove.

Be sure to empty ash pan at least once a day.

In cleaning out flues be sure to scrape all sides of flues, and especially scrape off all soot that hangs to oven bottom. Pull all soot toward you, and be careful not to push any back into back flues, but scrape from extreme back forward.

Do not let reservoir covers stand open. Do not set a hot flatiron on the hearth or shelves.

If you use soft coal have your coal dry and well broken. Do not put much fuel on fire at a time. Clean the flues out often, and scrape both top and bottom of flue.

If you use hard coal always use range size. Fine coal will not do. Shake the grate often, and keep the clinkers and dead coals cleaned out of ends and corners of fire box. Keep the fire box filled up even with top of fire linings.

If you use wood always use wood linings. Do not cut the wood too long. It should be dry and well seasoned. Green or wet wood gives about half the heat that seasoned wood does, and burns slowly.

If you have a "National" use LESS FUEL than you would with any other stove or range.

Our Guarantee

Our stoves will always work with four joints of pipe out of doors in the open air, away from any buildings. Any stove that will operate under such a condition will work splendidly if properly put up to a good flue.

Never send back a stove complained of without first trying to correct the difficulty. If you cannot do so, write us, and we shall be glad to offer suggestions.



Excelsior Stove & Manufacturing Company

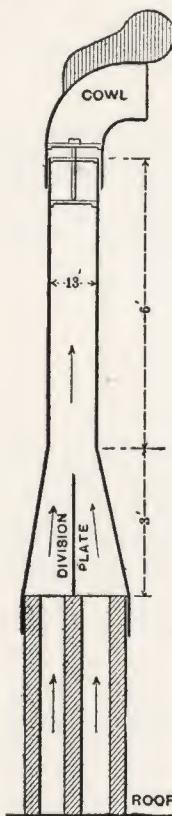


Fig. 1

To Improve a Weak Chimney

Stoves—Their Operation

Stoves do not have a draft, therefore do not expect them to draw; as well expect a buggy to run without the agency of a horse or other force to draw it. The chimney produces the draft, and the character of draft will be in relation to the character of chimney — good in a chimney which is built to promote draft, and bad or sluggish in a chimney which has obstructions.

A thorough understanding of the phenomena of draft will indicate the requirements of a chimney, make self-evident the existing evils, and point out the remedy in any chimney which lacks the required amount of draft for the successful operation of any stove attached.

Draft is caused by the unequal temperature of air. Rarefied air travels in a spiral column and rises into space, displacing cold air in its passage. If rarefied air is confined to a narrow passage, as in a chimney, it causes draft, which in strength will be in proportion to the length of the spiral column. These spirals of rarefied air begin at the entrance of the stovepipe into the chimney, and continue in a column to the top outlet. At their formation the beginning is slow, but increases in velocity until they reach the open air; therefore, if the column is of great length, the movement is quick, and is termed strong draft.

It is obvious, therefore, that a chimney must be constructed to favorably accommodate a spiral movement of rarefied air. A circular perpendicular shaft is the very best, because it has the exact form of the spiral column. A square form is next best; it, however, offers some obstructions, due to the four corners, which hold a neutral air. An elongated space is a direct opposite to the spiral current, and therefore is a great fault in a chimney. Curves or contractions are a severe fault, since they tend to disrupt the even flow of the spiral column. Short chimneys offer an impediment, since the spiral column is broken after it has had a chance to form only a few turns, and is correspondingly weak.

Other things being equal, length is an indication of draft. Factories and mills would not go to the expense of high smoke-stacks if it were not necessary to get sufficient draft and reach above surrounding obstructions to a free flow of air over the tops of chimneys. If the stovepipe does not enter the bottom of a chimney, make it the bottom by filling the chimney below the pipe entrance; this can be done with a piece of sheet iron and cementing in place. This is necessary, since the spiral column of rarefied air requires an unobstructed beginning as well as termination.

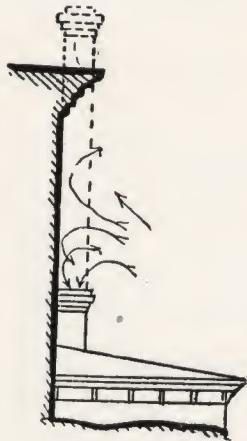


Fig. 3

Remedy for Low Chimney

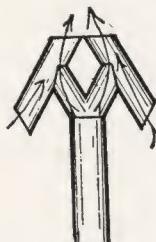


Fig. 2

Branch Chimney Cowl

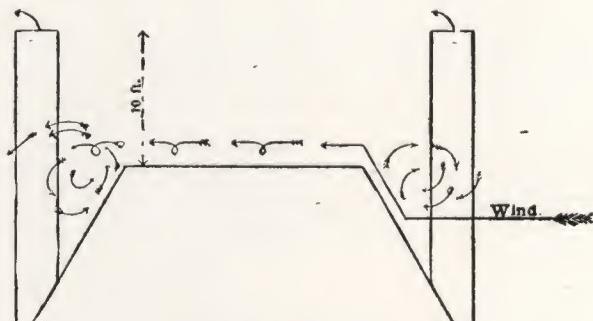


Fig. 4

Perfect Chimney Height

National Stoves, Ranges and Furnaces

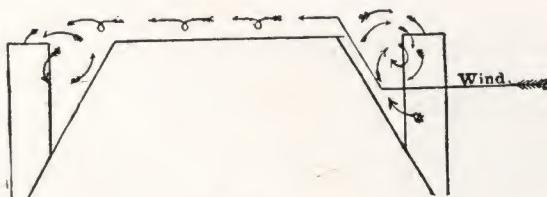


Fig. 5

Faulty Chimney Height

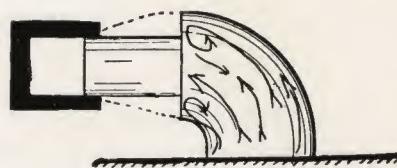


Fig. 6

Faulty Chimney Connection

If a chimney requires additional length, continue it with brick of the same size, as shown in cut (Fig. 3). If sheet iron extension, be sure it has the same area as all the flues in the chimney, and put in flue partitions, as shown in cut (Fig. 1).

Where chimneys cannot be extended above surrounding buildings or other obstructions use a revolving cowl, as in Fig. 1, or a branch stationary cowl, as in Fig. 2. A faulty chimney connection is shown in Fig. 6, since the connection is a reduction of the size pipe. It is equally faulty to reduce the size of pipe less than the pipe collar on the stove; stoves having 7-inch outlet collars have also 7-inch flue system throughout, and must have a 7-inch pipe to serve it.

New stoves will not bake on the bottom, because they are new and too clean. A few days' use will put an ash deposit on the main bottom under the oven, and retain the heat to the bottom oven plate, after which it will bake. In all cases where a stove is complained of, and actually fails to operate satisfactorily, the fault in either case of cooking or baking can be traced to the draft, which, as indicated above, may arise from many causes.

Condensation in Stovepipes

Its manifestation is a black tarry water leaking out of the stovepipe joints; this is caused by the moisture in the fuel. Wood, soft coal or hard coal contain a percentage of moisture, no matter how dry apparently; the degree of moisture is in the order in which they are named. When wood is slowly heated, this moisture is given off in the form of vapor, and when the draft is made sluggish by closing the stove dampers this vapor condenses in the pipe, and becoming mixed with the soot, the whole is called creosote.

When a brisk fire is kept up in the stove the creosote is not noticeable, as the rapid draft carries out the vapor before it has had time to condense and run out of the pipe. The remedy is to keep up a circulation; this can be done by an air opening in the pipe near its beginning, and acts as a check to the fire.

Stove dealers who will devote a little time to studying draft and its causes will save themselves much annoyance, and never find a stove they cannot make operate satisfactory to their customers.

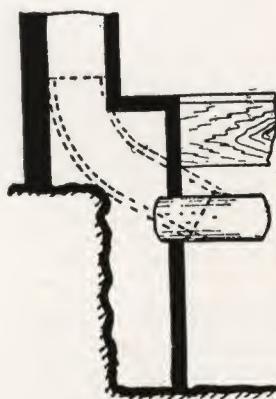


Fig. 7

Improvement Bad Conditions



Excelsior Stove & Manufacturing Company

National Armco Iron Ranges

Strictly High Grade

Awarded Gold Medal at the World's Fair, 1904, for Efficiency, Durability and Simplicity. National Ranges are original in all features, imitating no other; they are better than any other make. Every feature in construction has been thoroughly considered to make them handsome, durable, simple and perfect in operation, giving special study to economy of fuel. We have succeeded so well in the latter that we guarantee National Ranges to do better work with less fuel than other stoves or ranges on the market.

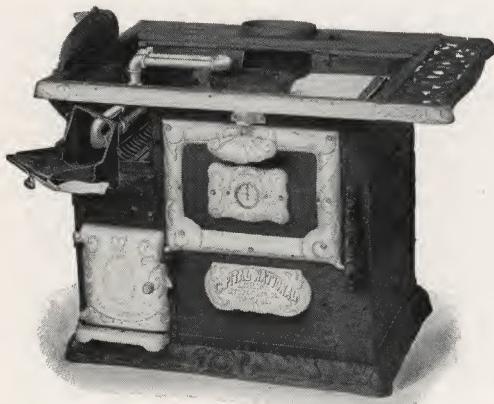


Fig. 8

Shows the interior view of the arrangement of a National water-front coil. The coil consists of a double pipe that enters near the lower edge of the front grate and forms two coils in the grate and two coils over the top of the fire box. The entire coil is at all times subjected to the direct action of the fire, and heats more water than any other style water-front. This view also shows the asbestos covering over the top oven plate, with the cast lining reinforcement on the front half, which thoroughly protects the oven from the fire.



Fig. 9

A rear view of range, showing the all-cast flue, and demountable elbow. This elbow is removable which allows the range to pass through an ordinary door opening. A drive latch holds the elbow on permanently. Also extension fire box, to accommodate long length wood, and our plunger damper, which is entirely outside the range body. The operating parts are not subjected to the fire, and therefore should be indestructible.



Fig. 10

Shows our construction of Armco iron back flue mounted with a cast elbow, which is the point of wear. A soot deposit in this elbow cannot rust it to destruction. The holes, shown below the back flue, ventilate under the range, and prevent overheating the floor.



Fig. 11

This view exhibits the space between the bottom grate and front grate, which allows free access to poke the fire, and preserves a clean grate at all times. The pronged front grate admits an ample supply of draft, producing perfect combustion across the entire fire box. Every feature of convenience has been thoroughly incorporated in the construction of National Stoves and Ranges.

National Stoves, Ranges and Furnaces

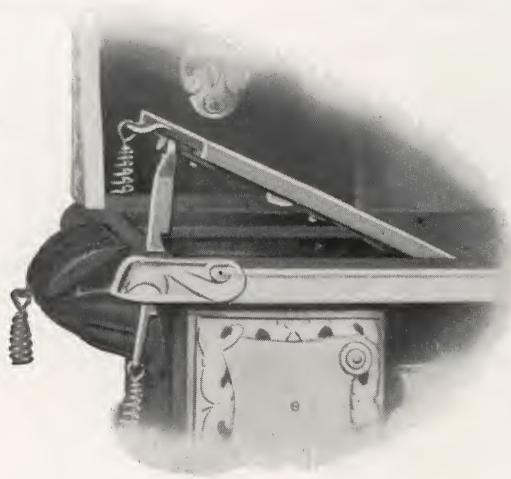


Fig. 12

Illustrates the National device for raising the front key-plate section of the top. The mechanism consists of a ratchet bar, which supports the front key-plate at any angle. This presents a suitable space for broiling, toasting, etc., and is a special convenience to kindle a fire. Moreover, a very slight raising will serve as a check to any over-amount of fire in a few moments.

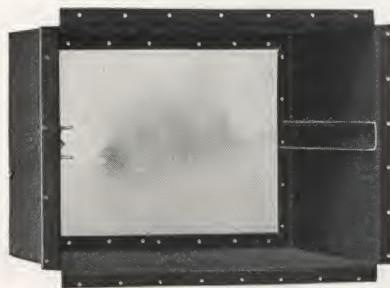


Fig. 13

This shows inside view of our method of constructing Armeo iron ovens. The front and back of the oven is flanged all around, and riveted direct to the body. These flanges furnish extra strength, and thoroughly prevent the oven warping away from the body, especially in the spaces between the rivets. The double oven rack slide permits placing the rack high or low, as required for various kinds of baking.



Fig. 14

A bottom view of our National Armeo iron oven, showing the rib joint in center of oven bottom. This joint represents the two ends of the sheet flanged downward one inch and riveted together, being a part of the solid stock. It forms a truss across the oven, which forever holds the oven bottom straight. A reinforcement is effected by the two cast-iron bar braces on each side of the rib joint.



Excelsior Stove & Manufacturing Company



Fig. 16

This illustrates the best possible method of reservoir construction. There is no damper to confuse the operator, and no condensation; no soot deposit on the reservoir boiler that interferes with proper heating of the water. It cannot interfere with proper baking of the range, since it has outside contact only. Average capacity 10 gallons. Easily attached or detached. A special fastening device allows the reservoir to be bolted to the body permanently and is sufficiently strong so that the range may be carried by the reservoir. Universally satisfactory.

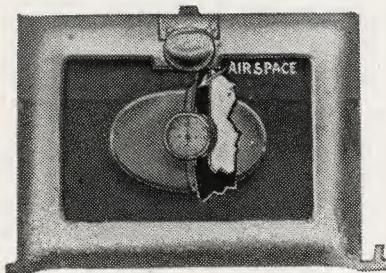


Fig. 17

Insulated oven door. Consists of two separate sheets of steel, with a dead air space that prevents the oven radiation and loss of heat. It also prevents tarnish of the nickel trimmings, and a more uniformly heated oven.



Fig. 18

Simmering Cover. A convenience of incalculable merit, a necessity at time of cooking every meal, the place for slow cooking, indispensable for cooking cereals. The small cover in the center is adapted for small cooking vessels.

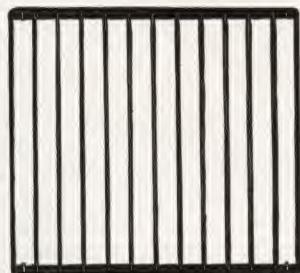


Fig. 19

National never-break wire oven rack, strong and substantial. Offers no obstruction to a free circulation of heat throughout the oven space, and insures uniform baking top and bottom.



Fig. 20

Bottom view of National key-plate center, with angle flange around all the edges, making a strong and durable plate. The covers and cross-centers are reinforced with flanges over the under surfaces. These equalize the expansion, and prevent cracking.



Fig. 21

The National wonderful porcupine fire back, the feature that has put National Stoves and Ranges in advance of all others. This fire back radiates the heat into the oven through direct radiation, and also through "pin radiation;" each pin, or porcupine, conducts a supply of heat to the oven direct from the fire the moment fire is started; therefore, as soon as the fire has attained the 225 degrees of heat necessary, the oven will register the same temperature; in consequence it is then ready for baking. It is obvious, therefore, that a small amount of fuel is required to obtain the desired results. When using a National Stove or Range you buy only half the fuel required in other ranges. This form of construction makes the fire back exceptionally durable. We guarantee it for twenty-five years.

National Stoves, Ranges and Furnaces

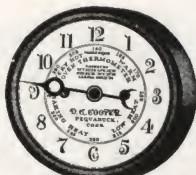


Fig. 22

Our National oven thermometer saves time, fuel and badly baked food. It enables you to do all kinds of baking with certainty and exactness. It measures heat just as a clock measures time. Tells you when your oven has reached the degree of heat desired. It avoids bad luck with your baking, which is due to an improperly heated oven more than to any other cause.

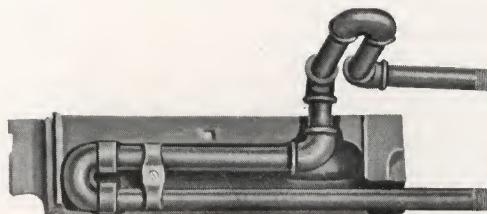


Fig. 23

National Front Water-Coil

Fig. 23 is described in Fig. 8.



Fig. 24

National Cast Water-Front, Made Extra Strong,
with Large Water Channels



Fig. 25

National Cast Water-Back, Heats the Greatest Amount of Water,
Does Not Interfere with the Baking of the Oven

Figs. 24, 25. These show the National cast water-front and cast water-back. Every one is tested to one hundred pounds pressure, which insures perfect goods.



Fig. 26

This is a two-pipe water coil that lays against the fire-back. It can not interfere with baking in the oven, since it does not cover the fire back. It is covered with fire nearly all the time, and heats a greater amount of water than a cast water-back.



Fig. 27

Represents our four-pipe water coil back. It lays close against the fire back; however, not so close but it allows the fire to circulate back of the coils; therefore it does not interfere with the baking, and since the heat attacks the coils over their entire surfaces, it heats a large amount of water very quickly.



Fig. 28

Represents our cast water U used in our Hotel National. It occupies the rear of fire box and both sides extend half way of the fire back space. It has a web in the center to promote perfect circulation of the water, fitted for 1 1/4-inch pipe.



Fig. 29

This is our water front "L." It is made of cast iron. Takes the place of the front grate and rear end lining. It has an inside partition through the center for perfect circulation of the water.



Excelsior Stove & Manufacturing Company

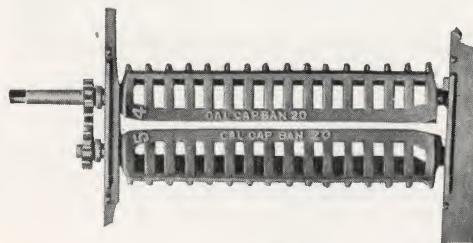


Fig. 30

National Duplex Grate for Coal

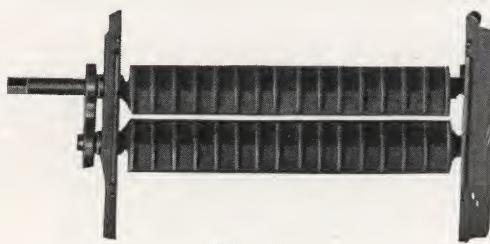


Fig. 31

Reversed for Wood, No Grate Frames to Warp, Removable without Disturbing Water-Fronts or Water-Backs

Figs. 30, 31. National Duplex grate. Made without a grate frame, a bar on each end serves all requirements, thereby avoiding the conditions which get the grate out of order. Solid sides make of it a perfect wood grate when in a closed position, and at the same time reduce the depth of the fire box when wood is used as a fuel. Lateral bars the full length of grate sides prevent coal or clinkers from interfering with the ease in dumping the grate while the fire is burning. The cog wheels are outside the fire line, and are not subject to injury.

These are nearly all exclusive National Features and can not be found in other lines of stoves and ranges.



Fig. 32

National Patent Pipe Regulating Damper

That all chimneys do not present a uniform draft is so obvious that it ought not to require any argument at all, and yet people will attach any kind of range or stove to any kind of chimney and expect satisfactory results. There can be no guesswork and no failure; no getting the oven too hot and burning the baking; no waste of fuel when you use our patent regulating pipe damper. This controls absolutely the chimney draft to a desired degree.

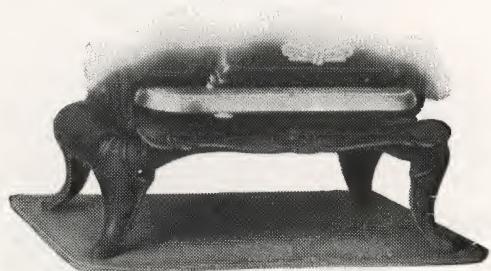


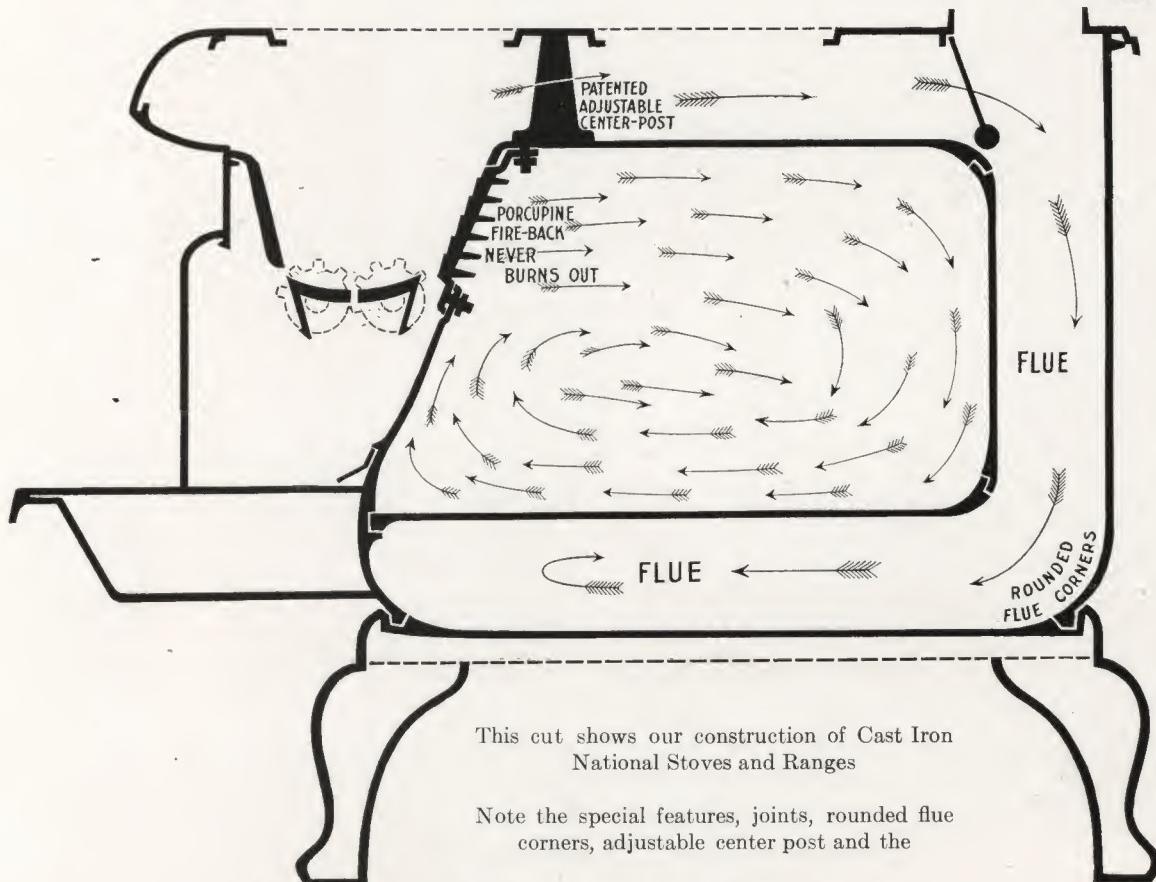
Fig. 33

Shows our construction of leg base stoves and ranges. The front section of the base is made portable, and arranged to lift upward and out of the way when sweeping under the range. A novel arrangement holds it suspended while in use, after which a push with the foot drops it back to place. A sub-base strip back of the portable base section holds the legs firmly in place.

NATIONAL STOVES RANGES AND FURNACES

A Strictly High Grade Trade-Mark Line Built for Durability and Economy in Fuel

National Stoves, Ranges and Furnaces



Wonderful Porcupine Fire Back

This feature is one of the strongest selling points in National Stoves and Ranges. While we do not claim that a single fire back is a new feature, since stoves made sixty years ago were made with a single fire back, we do claim that our construction and application is new and can be found exclusively in National Stoves and Ranges.

The reason for the indestructibility of our Porcupine Fire Back consists alone in the fact that the heat from the fire passes through the casting unobstructed. Although the obverse side of the fire back is exposed directly against the live fire, the reverse side is exposed to the oven space of the stove, which is a limited space; however, this is a part of universal space, consequently, the reverse side of the fire back is as much an exposed casting as the oven door, hearth or cover and center pieces. Because of this exposure to space the parts of a stove so exposed never burn out.

While it is true that covers, centers, etc., are required as repairs, the fact remains that none of these parts ever burn out; they become cracked and warped but never melted like an encased casting. Burn out is simply a term to express melting or fusing, which is the condition that occurs.

The porcupines or pins as used on our Porcupine Fire Back is the application of "pin radiation" to the natural direct radiation of a flat surface. "Pin radiation" is a potent factor in heat transmission. It finds recognition in electric heating, since it is used for that purpose to favor the latent power contained in the electric current.

Air-cooled cylinders in automobiles also exemplify its application to enhance radiation, since they require the greatest possible heat radiation from the engine cylinders to prevent overheating. "Pin radiation" is efficient where cast iron is the conductor. Cast iron is a porous metal, the cellular portions are nonconductors, the solids alone radiate heat, the rays of heat given off are in proportion to the solid exposure; therefore, the addition of the porcupines increases the solids or radiating surface thirty-five per cent more than a flat fire back, and has ninety per cent more efficiency than fire backs in stoves and ranges that are placed in front of an oven plate and provided with an air space, back of the fire back.

This means that our Porcupine Fire Back will heat the oven, ready for baking, in far less time than any other, and requires only enough fuel to cover the grate about two inches high to do the work. It is obvious, therefore, that great savings in fuel are effected, and gives the user the quick oven so much desired.

We have used this Porcupine Fire Back in National Stoves and Ranges for the past twenty-four years; we have made more than a million of them, and not one has burned out during that time. This is proof positive that our wonderful Porcupine Fire Back is eternal. We guarantee it for twenty-five years.

Do you recognize the selling power this feature gives the dealer over his competitor, if this improvement is explained to the prospective purchaser?

Sell National Stoves and Ranges for cause.



Excelsior Stove & Manufacturing Company

OUR Line of Ranges comprises everything in Steel, Cast Iron, Porcelain Enameled and Combination Coal and Gas: a style and price to suit any prospective buyer.

The working part (interior) of NATIONAL Ranges contains exclusive National features that make them better than others for the user, and results in lasting customers for the dealer.



NATIONAL
RANGES

Make cooking
a pleasure
and a contented
household



Excelsior Stove & Manufacturing Company

Hotel National

Double Oven Armco Iron Range

This range has two ovens and single fire. It is provided with a direct draft damper and slide damper over the flues of each oven. These dampers may be operated at will, closing off one oven at any time. This leaves one oven in operation and the other serving as a warming closet. Both ovens may be operated at the same time. The fire box is provided with a duplex grate for coal (reversing the grate adapts it for wood). It has extra heavy substantial cast iron linings and large pouch feed door.

The water heater consists of a U-shaped section of the fire box, which is the only form of construction that equalizes the heat in both ovens, and will heat more water than any other. This range is built in a first-class manner. The body is heavy Armco iron plate, with extra Armco iron plate and asbestos lining, making three distinct walls. The ovens are ribbed and braced on the bottom with angle irons. The top oven plate is covered with a cast iron fretwork. It has a double main bottom. The body is black japanned, oven doors are double lined, with dead air space (like a refrigerator door) preventing escape of the heat, and making a corresponding saving in fuel.

We have spared no expense to make this range first-class in every respect, so as to withstand hard usage. While this construction will not permit us to compete with the cheap ranges offered to the trade, our prices are as low as consistent with high-class construction.

We furnish these ranges with ten 8-inch or ten 9-inch cooking holes in key-plate tops with loose short centers. Can also furnish them with French plate top, consisting of three solid plate sections without covers, excepting center section, provided with one 13-inch hole and reducing ring to 9-inch.

Highly nickel trimmed to lend a clean and bright appearance to the kitchen.

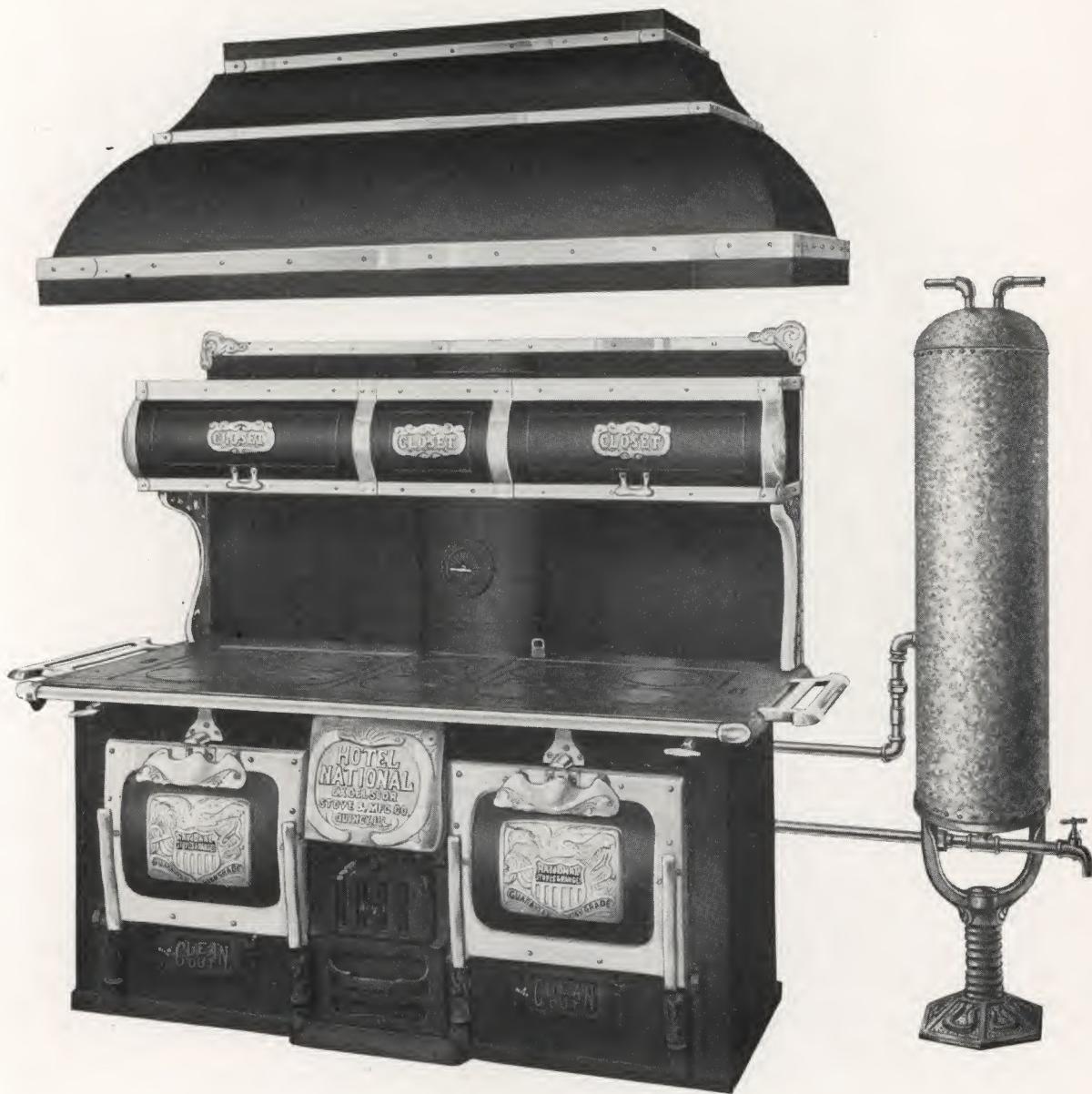
For Hard Coal, Soft Coal Or Wood

Number	Holes	Ovens, Each	Top Surface	Weight	Price	Code Word
820	Ten 8-inch	20x24x16	34x67	960	\$. . .	Bespread
920	Ten 9-inch	20x24x16	34x67	970	. . . . .	Bestrail
20 F. T. (French Top)		20x24x16	34x67	960	. . . . .	Bestir
High Shelf and first joint Pipe, extra				85	. . . . .	Waste
High Closet and first joint Pipe, extra				120	. . . . .	Wall
Cast U Water Heater fitted in Range, Fig. 28, extra				65	. . . . .	Watery
Cast U Water Heater separate from Range, extra				65	. . . . .	Water
30-gallon galvanized Pressure Boiler with Stand, extra				85	. . . . .	Walrus
52-gallon galvanized Pressure Boiler with Stand, extra				145	. . . . .	Waltz
Pipe Connections from Pressure Boiler to Water U, extra				35	. . . . .	Wander
Canopy over Range, nickel trimmed, extra				160	. . . . .	Warble

Triple Plated Nickel Trimmings — Oven doors, oven door panels and handles, oven door stops, fire door, front towel bar, end towel rails, shaker and all edges, brackets and jambs on high shelf and closet.

Water Heater Illustrated, page 11.

National Stoves, Ranges and Furnaces



Japanned Armco Iron Range, Double Oven

For Hard Coal, Soft Coal or Wood

Hotel National

Description, Opposite Page



Excelsior Stove & Manufacturing Company



Black Armco Iron Range

Cafe National WITH HIGH SHELF

For Hard Coal, Soft Coal or Wood

Number	Ovens	Top Surface	Weight	Price	Code Word
924	24x24x16½	34x47	745	\$.....	Botany
930	30x24x16½	34x53	795	.....	Bother
Extra Wood Grate, to make shallow Fire Box, extra		20			Wooden
Cast Water Front Fitted in Range, Fig. 24			45		Watery
extra			45		Water
Cast Water Front separate from Range, extra			45		
50-gallon galvanized Steel Tank, with Cover, Brass Faucet and plain Stand, extra			120		Whiten
75-gallon Tank, same as above, extra			130		Whither
Pipe Connections, Range to above Tank			12		Wander
Pressure Boilers — See Hotel National					
Canopy for No. 924 — See Hotel National, extra			140		Whip
Canopy for No. 930 — See Hotel National, extra			150		Whirl
If wanted without High Shelf and First Joint Pipe, deduct Breeching to connect Smoke Pipe of Double Range to Single Flue, extra . . . . .			...		Whisk
					Whithers

We do not furnish couplings for lead pipe connections from water front to tank. Galvanized iron pipe must be used for this purpose. We furnish these ranges with key-plate top consisting of two 9-inch holes, four 9-inch holes, six 9-inch holes, or entire top solid in three sections; also French Top consisting of one 13-inch hole with 9-inch cover and solid rear key-plate. Always state in ordering style top wanted. Unless otherwise specified, we ship all ranges two 9-inch holes in front section, and balance of top with two solid plates. These ranges can be set tandem, two or more may be coupled together. For this purpose we furnish them with a special coupler top section. (See description of Tandem Range, opposite page.) Description, page 20.



Black Armco Iron Range

For Hard Coal, Soft Coal or Wood

Cafe National

This view shows our Cafe National set (tandem), consisting of one No. 924 and one No. 930 coupled together. We can furnish these in any number, set together with invisible smoke pipe, if so desired, at an extra charge.



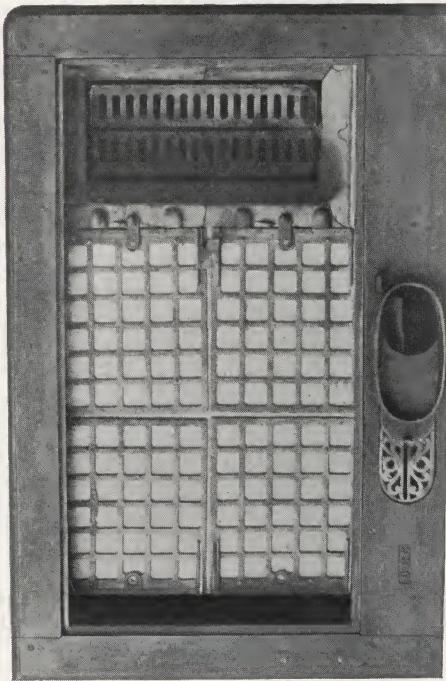
Excelsior Stove & Manufacturing Company

Cafe National

For Hard Coal, Soft Coal or Wood

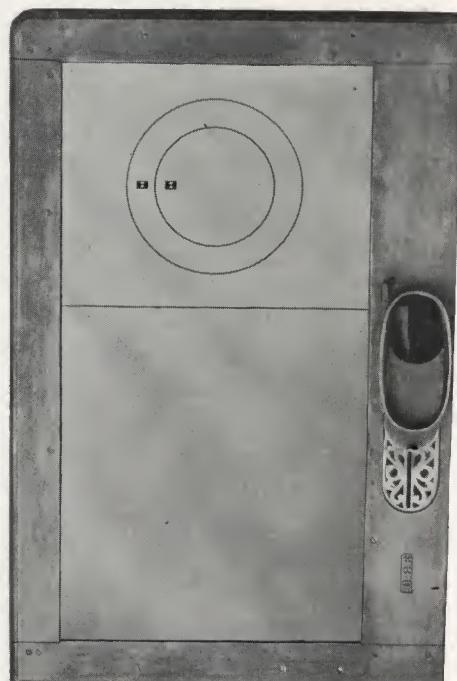
The Cafe National is especially adapted for hotel, restaurant and camp purposes. It is constructed in all its features extra heavy and substantial. The top of oven is concave, and covered with asbestos. It is also reinforced with cast iron fretwork, which will hold ashes in all the meshes, and serve as a further protection to the oven. The fire back and front lining are sectional and interchangeable; the grate is the National duplex for coal; reversed, it forms a perfect wood grate; the grate may be removed through front of range without disturbing the water connections. Combination pipe damper and check draft located in range top consists of a slide plate that automatically closes the pipe opening partially, and admits a supply of air through the fretwork openings, to carry off the gases and check the fire. A plunger damper, for direct draft, enables a quick fire at all times. Oven bottom is made with two-rib joints, and bar iron braces to prevent warping. The body is thoroughly lined with asbestos and Armeo iron plate lining, making a three-wall system. It is also provided with a false bottom and ventilated space between the main and false bottom, which thoroughly prevents heating the floor under the range. Drop pouch door is $7\frac{1}{2} \times 9\frac{1}{4}$ inches; permits the use of large size coal or wood. It will serve wood 26 inches long. The oven door horizontal bars are wrought iron and non-breakable.

Arranged for east water front, using one-inch pipe. Body finish is black. Trimmings, ground polish. These ranges can be set (tandem), two or more coupled in a continuous line. For this purpose we provide a coupler top. The regular high shelves used on single oven ranges may be used when two or more are set tandem. These ranges may also be set in the center of kitchen (Center Range), setting as many as desired back to back. This form can also be furnished with invisible smoke pipe and Center Range high shelf. Prices on Center Ranges furnished on application.



View of Cafe National—Interior Top

Showing interior of firebox, fretwork over oven top, and asbestos covering, also check damper in pipe collar; this consists of a flat damper plate that fits flush into the top and slides under the smoke collar, partially closing off the pipe opening and exposing a fretwork opening into the flue space, which admits cold air to check the fire.



View of Cafe National—French Top

The French Top of the Cafe National consists of two solid key plates. The front plate is provided with a 13-inch hole and reducing ring down to 9-inch cover; the rear key plate is a one-piece solid casting made extra strong and heavy. Very popular for restaurant use.

National Stoves, Ranges and Furnaces



Cast Iron Porcelain Enameled Balustrade

This illustration shows our Porcelain Enameled Balustrade attached to a National Range Top, which may be used when range is desired without a high closet.

High Closets on Ranges have become in such general use that many dealers have come to the conclusion that all Range buyers must accept the range in all instances trimmed with a high closet.

This is not a fact: in many cases customers prefer a range without a closet and since the omission of the closet makes a substantial reduction in price, it increases sales: therefore, we recommend that dealers carry a few ranges in stock with this balustrade, instead of high closet.

Can be furnished with all National Ranges, which show a list with the balustrade.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Elegant National

S Q U A R E W I T H H I G H C L O S E T

Description, Pages 24-25

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Elegant National

WITH RESERVOIR AND HIGH CLOSET

Description, Pages 24-25

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Elegant National

Armco Iron Range

For Hard Coal, Soft Coal or Wood

Construction — A plain and handsome design, rich in appearance, and high-grade construction in every detail; nothing has been omitted that lends to efficiency and durability. The body is extra heavy blue finish Armco iron. The main bottom and flues are thoroughly asbestos lined. The flues are reinforced with Armco iron lining, making a three-wall system. The top oven plate is covered with asbestos and reinforced on front section with cast iron plates to resist the direct action of the fire; all cast-back flue. Sheet flue system, with extra large flues, insures easy draft, with the use of soft coal or wood, and requires infrequent cleaning. The top is cut in four sections, and fitted with our key-plate raising attachment, also key-plate centers and loose short centers, extra heavy covers, substantial center rest. Combination end swing feed for wood and drop pouch feed for coal; extra large sheet steel ash pan. Mounted on cast base with elaborate nickel legs. One simmering cover furnished with each range.

Oven — Large, square, high and roomy. The oven door is provided with outside spring which balances the door, and makes it easy to open or close. Porcelain enameled door panel and wire oven rack.

Fire Box — Extra heavy cast linings, and fire-box extension for long lengths wood. National Duplex grates, removable through end without disturbing lining, fitted with our wonderful porcupine fire back (guaranteed twenty-five years).

Damper — Plunger damper for direct draft, operates on outside of body and can never warp. Slide damper in front door, provides ample supply of draft.

Reservoir — We furnish a copper reservoir, thoroughly tinned inside, and heats by contact. It lays close against the range body, heating the water continually, capacity 10 gallons. The contact reservoir is portable, easily attached to square-top range. It may be bolted permanently to the body, if desired, so that the range may be carried by the reservoir.

Water Heater — Arranged for cast water-front, cast water-back, front water-coil and two-pipe water-back coil. Our system of water-back heats most water and does not interfere with baking.

High Closet — Made of blue polished steel, highly nickel trimmed, and furnished with our patent regulating pipe damper, which controls the fire perfectly. Porcelain enameled closet door and porcelain enameled splasher.

Triple Plated Nickel Trimmings — Oven door, oven door handle, fire door, ash door, flue door, legs and three skirtings, towel bar, grate shaker, cover lifter, knobs, keys and all jambs, pipe damper and balustrade corner on high closets.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Elegant National

Armco Iron Range For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Oven	*Top	Surface	SHIPPING WEIGHTS			
			Square	Reservoir	With Square	Balustrade Reservoir	With Square	High Reservoir
8618	Six 8-inch	18x20x13	29x43	29x48	392	462	455	525
9618	Six 9-inch	18x20x13	29x43	29x48	395	465	458	528
8620	Six 8-inch	20x20x13	29x45	29x50	399	469	462	532
9620	Six 9-inch	20x20x13	29x45	29x50	412	472	465	535

Prices

(See net price list)

With Porcelain Enamaled Balustrade

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Madness	\$.....	Magnity
9618	Madrigal	.....	Magnolia
8620	Maggot	.....	Magpie
9620	Magician	.....	Maiden

With High Closet

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Maintop	\$.....	Malice
9618	Maize	.....	Malign
8620	Majesty	.....	Malignity
9620	Majority	.....	Mallet

Water Heater fitted in Range, Figs. 23, 24, 25.....	Extra	\$.....	Code Word
Water Heater Separate from Range, Figs. 23, 24, 25.....	Extra	.....	Watery
2-Pipe Water Back Coil, Figs. 26.....	Extra	.....	Water
Copper Reservoir ordered separate from Range.....	Extra	.....	Wattle
High Closet ordered separate from Range.....	Extra	.....	Weed
If wanted with Polished Top.....	Extra	.....	Writhes
If wanted without Balustrade.....	Deduct	.....	Writer
			Wild

*Top surface measurements include Back top shelf on Square Ranges.

Copper Reservoir 10 gallon capacity, heats by contact.

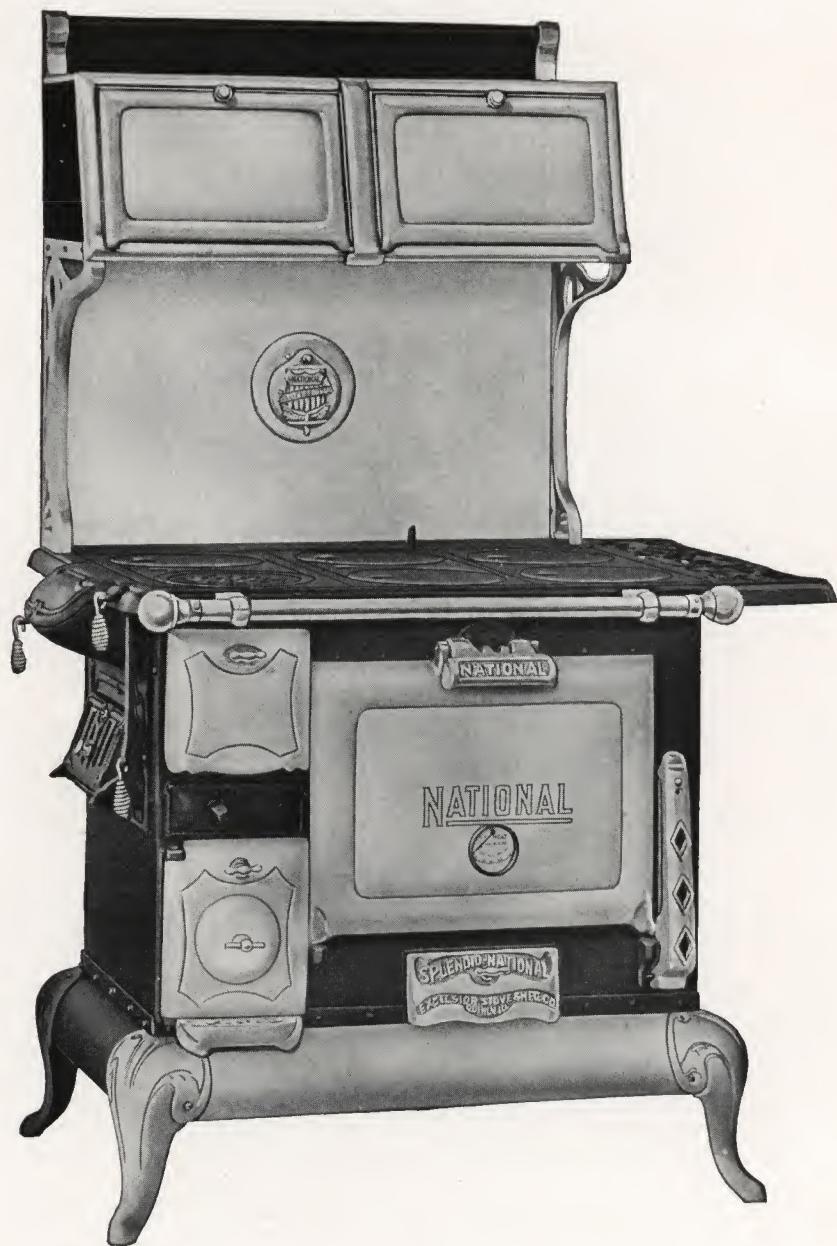
Water Heater described on Page 11.

Balustrade described on Page 21.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Splendid National

S Q U A R E W I T H H I G H C L O S E T

Description, Pages 28-29

F O R G A S A T T A C H M E N T T O F I T T H I S R A N G E , S E E P A G E 1 0 1

National Stoves, Ranges and Furnaces



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Splendid National

WITH RESERVOIR AND HIGH CLOSET

Description, Pages 28-29

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Splendid National

Armco Iron Range

For Hard Coal, Soft Coal or Wood

Construction — Polished Armco iron range mounted on steel leg base and cast iron legs, making a sanitary range. The ornamentation is a smooth and plain finish, easily cleaned and kept clean. Asbestos lined and re-inforced with Armco iron plate over the asbestos forms a three wall system of body. The top oven plate is covered with asbestos, the front half is also covered with Armco iron plate over the asbestos to protect against the direct action of the fire. Cast iron back flue. The top is full width and provided with a loose cast elbow back of the high closet, this elbow is removable, so that it does not interfere with the range passing through an ordinary door opening. Sheet flue system, with extra large flues, insures easy draft when using soft coal or wood. The top is cut in four sections, and fitted with our key-plate raising attachment; also key-plate centers and loose short centers in all key-plates, heavy covers, substantial center rest, large drop end feed door for coal or wood, sheet steel ash pan and ash guards, that conduct all ashes into the pan. One simmering cover furnished with each range.

Oven — Made of Armco iron with rib joint in bottom and bar iron braces. Large, high and roomy, provided with non-breakable wire oven rack. Outside spring balanced oven door. Porcelain enameled oven door panel.

Fire Box — Extra heavy cast linings, and fire-box extension for long lengths wood. National duplex, grate, removable through range top, fitted with our wonderful porcupine fire back (guaranteed twenty-five years).

Dampers — Plunger damper for direct draft, slide damper in front drop door.

Reservoir — We furnish a copper reservoir, thoroughly tinned inside and heats by contact. It lies close against the body of range and heats continually. Capacity 9 gallons. The contact reservoir is portable, easily attached to square top range. A special arrangement permits the reservoir to be permanently bolted to range if desired.

Thermometer — Furnished with all sizes. Measures heat just as a clock measures time. It avoids bad luck when baking.

Water Heater — Arranged for cast water back, cast water front and front water coil. When ordering be sure to specify kind wanted.

High Closet — Made of polished steel with porcelain enameled splash guard and door panels, it is highly nickel trimmed and furnished with regulating pipe damper, which controls the fire perfectly.

Triple Plated Nickel Trimmings — Oven door and handle, fire door, ash door, ash guard, flue door, two legs and front base strip, towel bar, grate shaker, cover lifter, knobs, keys, front and doors, brackets, pipe damper, door knobs, and balustrade corners on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Splendid National

Armco Iron Range

For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Oven	*Top Surface		With Square	Balustrade Reservoir	SHIPPING WEIGHTS		
			Square	Reservoir			With High Square	Closet Reservoir	
8414	Four 8 inch	14x18x13	27x34	27x39	261	316	305	360	
8616	Six 8 inch	16x18x13	27x38	27x43	278	338	322	392	
8618	Six 8 inch	18x18x13	27x38	27x43	287	346	330	390	
8620	Six 8 inch	20x20x13	29x40	29x45	317	377	361	421	
9620	Six 9 inch	20x20x13	30x40	30x45	320	380	364	424	

Prices

(See net price list)

With Porcelain Enamelled Balustrade

Number	Square	Code Word	Copper Reservoir	Code Word
8414	\$.....	Barrister	\$.....	Bedabble
8616	Basblen	.....	Bedizen
8618	Basement	.....	Bediamite
8620	Basilicon	.....	Bedrench
9620	Basilisk	.....	Bedrop

With High Closet

Number	Square	Code Word	Copper Reservoir	Code Word
8414	\$.....	Begetter	\$.....	Benedict
8616	Begging	.....	Benefactor
8618	Begrudge	.....	Beneficed
8620	Beleaguer	.....	Beneficial
9620	Belesprit	.....	Beneficiary

Water Heater fitted in Range Figs. 23, 24, 25.....	Extra	\$.....	Code Word
Water Heater separate from Range Figs. 23, 24, 25.....	Extra	.....	Watery
Copper Reservoir ordered separate from Range.....	Extra	.....	Water
High Closet ordered separate from Range.....	Extra	.....	Weed
If wanted with Polished Top.....	Extra	.....	Writh
If wanted without Balustrade	Deduct	.....	Writer
		.....	Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas Attachment see Page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Fashion National

S Q U A R E W I T H H I G H C L O S E T

Description, Pages 32-33

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Blue Polished Armco Iron Range

For Hard Coal, Soft Coal or Wood

Fashion National

WITH RESERVOIR AND HIGH CLOSET

Description, Pages 32-33

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

Fashion National

Armco Iron Range

For Hard Coal, Soft Coal or Wood

Construction — A medium priced Armco iron range, mounted on leg base, a first quality range, it is well made in all parts. The body is made of blue Armco iron well lined with asbestos. The oven top is covered with asbestos and reinforced on front half with Armco iron plate that protects against the direct action of the fire. Sheet flue system with extra large flues adapted to the use of soft coal or wood. Armco iron back flue with cast bottom elbow. The top is cut into four sections, provided with heavy covers and centers, substantial center rest. Large end feed door for wood, sheet steel ash pan.

Oven — Made of Armco iron with rib joint in bottom and bar iron braces. It is square, high and roomy, provided with non-breakable wire oven rack, outside spring balanced oven door, porcelain enameled oven door panel.

Fire Box — Heavy cast iron linings, fire box extension for long lengths wood. Duplex grate for coal reversing the grate forms a perfect wood grate. Solid fire back ventilated.

Reservoir — We furnish galvanized iron or copper reservoir, the copper is thoroughly tinned inside; this form of reservoir heats by contact; it lays close against the body of range and heats continually; easily attached to square top range; capacity ten gallons. A special arrangement permits the reservoir to be permanently bolted to the range if desired.

Water Heater — Arranged for two-pipe water back coil or four-pipe water back coil and cast water "L" front. Our form of water back coil is not like the old style water backs, which interfered with the baking; it lays apart from the back, allowing the heat to pass entirely around the coils and heat a large amount of water.

High Closet — Made of blue steel, highly nickel trimmed, with porcelain enameled splasher back and furnished with our patent regulating pipe damper, which controls the fire perfectly.

Triple Plated Nickel Trimmings — Oven door, oven door handle, fire door, flue door, front base strip and two legs, towel bar, grate shaker, cover lifter, keys and all edges, brackets, jambs, door panel, handle and pipe damper on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Fashion National

Armco Iron Range

For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	Square	Top Surface Reservoir	With Square	SHIPPING WEIGHTS		
						Balustrade Reservoir	With Square	High Closet Reservoir
8414	Four 8 inch	14x19x12½	24x32	24x40	223	283	267	327
8616	Four 8 Two 7	16x19x12½	24x34	24x42	229	289	272	364
8618	Six 8 inch	18x19x12½	24x36	24x44	238	298	282	384
8620	Six 8 inch	20x21x12½	26x38	26x46	246	306	290	404
9620	Four 9 Two 8	20x21x12½	26x38	26x46	249	309	293	407

Prices

(see net price list)

With Porcelain Enameled Balustrade

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8414	\$.....	Mantel	\$.....	Marque	\$.....	Martello
8616	Mantua	.....	Marquis	.....	Martial
8618	Manual	.....	Marrow	.....	Martin
8620	Manumit	.....	Marshal	.....	Martyr
9620	Maroon	.....	Marshy	.....	Marvelous

With High Closet

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8414	\$.....	Masonic	\$.....	Mastoid	\$.....	Matrass
8616	Masonry	.....	Matadore	.....	Matrice
8618	Mastery	.....	Material	.....	Matercide
8620	Masticate	.....	Maternal	.....	Matron
9620	Mastiff	.....	Matinee	.....	Matting

Cast Water "L" Front fitted in Range. Fig. 29.....	Extra	\$.....	Code Word
Cast Water "L" Front separate from Range. Fig. 29.....	Extra	.....	Wordy
Cast Water Back fitted in Range. Fig. 25.....	Extra	.....	Work
Cast Water Back separate From Range. Fig. 25.....	Extra	.....	Watery
2 Pipe Water Back Coil. Fig. 26.....	Extra	.....	Water
4 Pipe Water Back Coil (Special order only). Fig. 27.....	Extra	.....	Wattle
Galvanized Reservoir ordered separate from Range.....	Extra	.....	Whist
Copper Reservoir ordered separate from Range.....	Extra	.....	Web
High closet ordered separate from Range.....	Extra	.....	Weed
If wanted with Polished Top.....	Extra	.....	Writh
If wanted without Balustrade.....	Deduct	.....	Writer
		.....	Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Blue Steel Range

For Hard Coal, Soft Coal or Wood

World National

S Q U A R E W I T H H I G H C L O S E T

Description, Pages 36-37

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Blue Steel Range

For Hard Coal, Soft Coal or Wood

World National

WITH RESERVOIR AND HIGH CLOSET

Description, Pages 36-37

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

World National

Steel Range

For Hard Coal, Soft Coal or Wood

Construction — This range will meet the requirements for an article at a low price, and at the same time maintain a degree of appearance that will permit a dealer to sell it to the average class of customers. Moreover, the construction and operation contains those characteristics peculiar to Nationals, which make them satisfactory in every instance. While the weight of materials used are not up to those embodied in our high class steel ranges, we have used in its construction reasonable stock. It will therefore give anyone good service. Body is blue steel, asbestos lined. Top is cut in two sections, and provided with ribbed covers and centers; the long center is bolted in place, making it very durable.

Oven — Made of Bessemer steel with rib joint bottom and bar iron braces. It is absolutely square, high and roomy, provided with non-breakable wire oven rack. Outside spring balanced oven door.

Fire Box — Heavy cast linings with self-locking, flat-shaking and dumping grate for coal, solid flat grate for wood. One-piece fire back.

Reservoir — We furnish galvanized iron reservoir. Heats by contact. It lays close against the body of range, and heats continually. Easily attached to square top range. Reservoir capacity 8 gallons.

High Closet — Made of blue steel, nickel trimmed and provided with a register check damper.

Water Heater — Arranged for two-pipe water-back coil if so ordered.

Triple Plated Nickel Trimmings — Oven door and handle, oven panel, flue door, end towel rod, also edges, closet ends, door panel and door handle on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



World National

Steel Range

For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	*Top Surface Square	Reservoir	SHIPPING WEIGHTS			
					With Balustrade Square	Reservoir	With High Closet Square	Reservoir
8412	Four 8 inch	12x18x10	21x27	21x31	125	140	170	185
8414	Four 8 inch	14x18x10	21x29	21x35	132	147	177	192
8616	Four 8, Two 7	16x18x11	21x31	21x37	140	155	185	200
8618	Six 8 inch	18x21x11	24x33	24x39	155	170	200	215

Prices

(See net price list)

With Steel Balustrade

Number	Square	Code Word	Galvanized Reservoir	Code Word
8412	\$.....	Mature	\$.....	Maze
8414	Maudlin	.....	Meadow
8616	Maul	.....	Meagre
8618	Mayor	.....	Meander

With High Closet

Number	Square	Code Word	Galvanized Reservoir	Code Word
8412	\$.....	Meaning	\$.....	Meddler
8414	Meantime	.....	Mediate
8616	Measure	.....	Medical
8618	Medalist	.....	Medicate

2-Pipe Water Back Coil, Fig. 26.....	Extra	\$.....	Code Word
Galvanized Reservoir ordered separate from Range.....	Extra	.....	Wattle
High Closet ordered separate from Range.....	Extra	.....	Web
If wanted with Polished Top.....	Extra	.....	Writh
If wanted on Legs instead of Base.....	Deduct	.....	Writer
If wanted without Steel Balustrade.....	Deduct	.....	Wound
If wanted for Wood only.....	Deduct	.....	Wild
			Wrestle

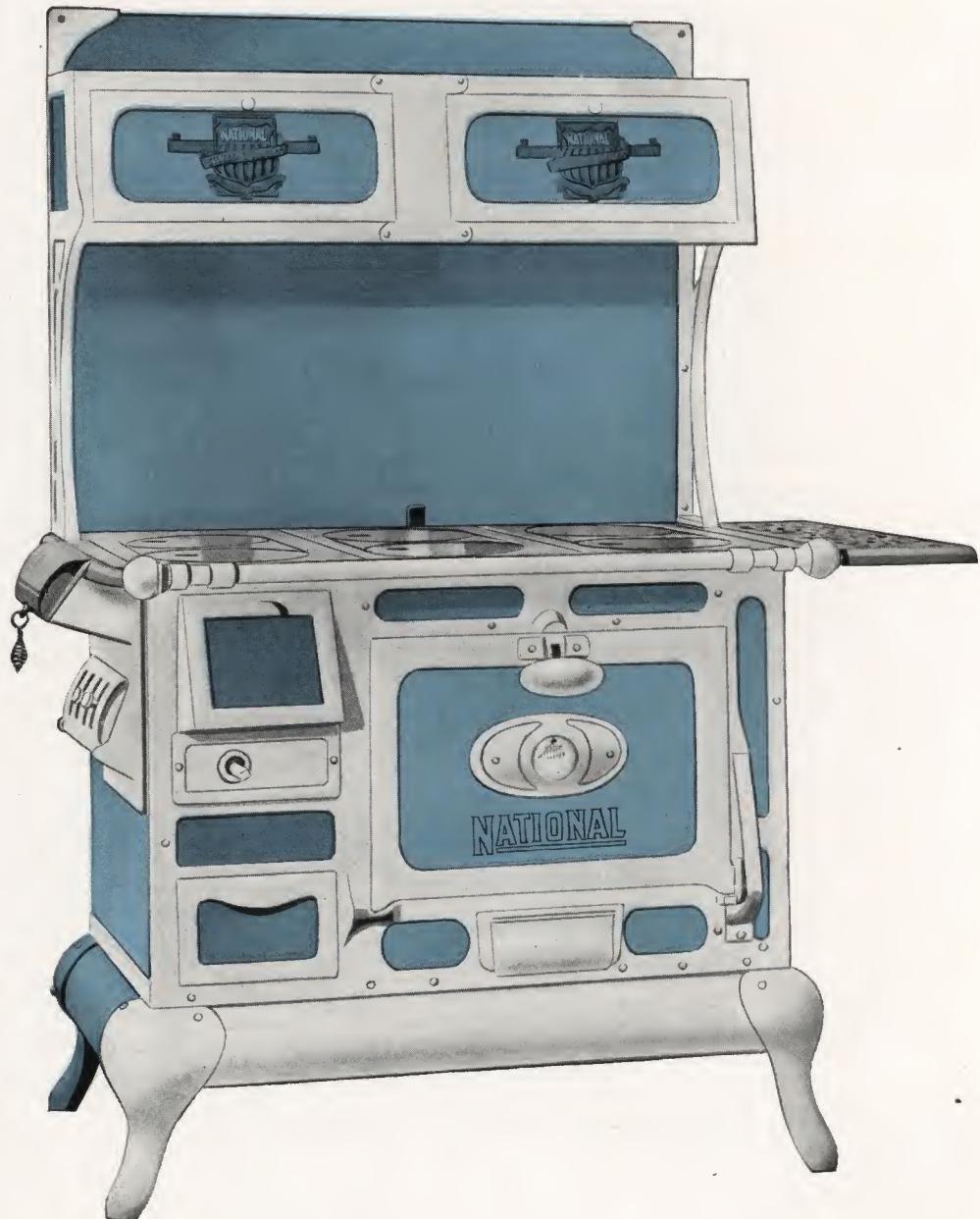
*Top surface measurements include Back top shelf on Square Ranges

Water Heaters described on Page 11

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Steel Range, Blue Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Deluxe National

S E R I E S B

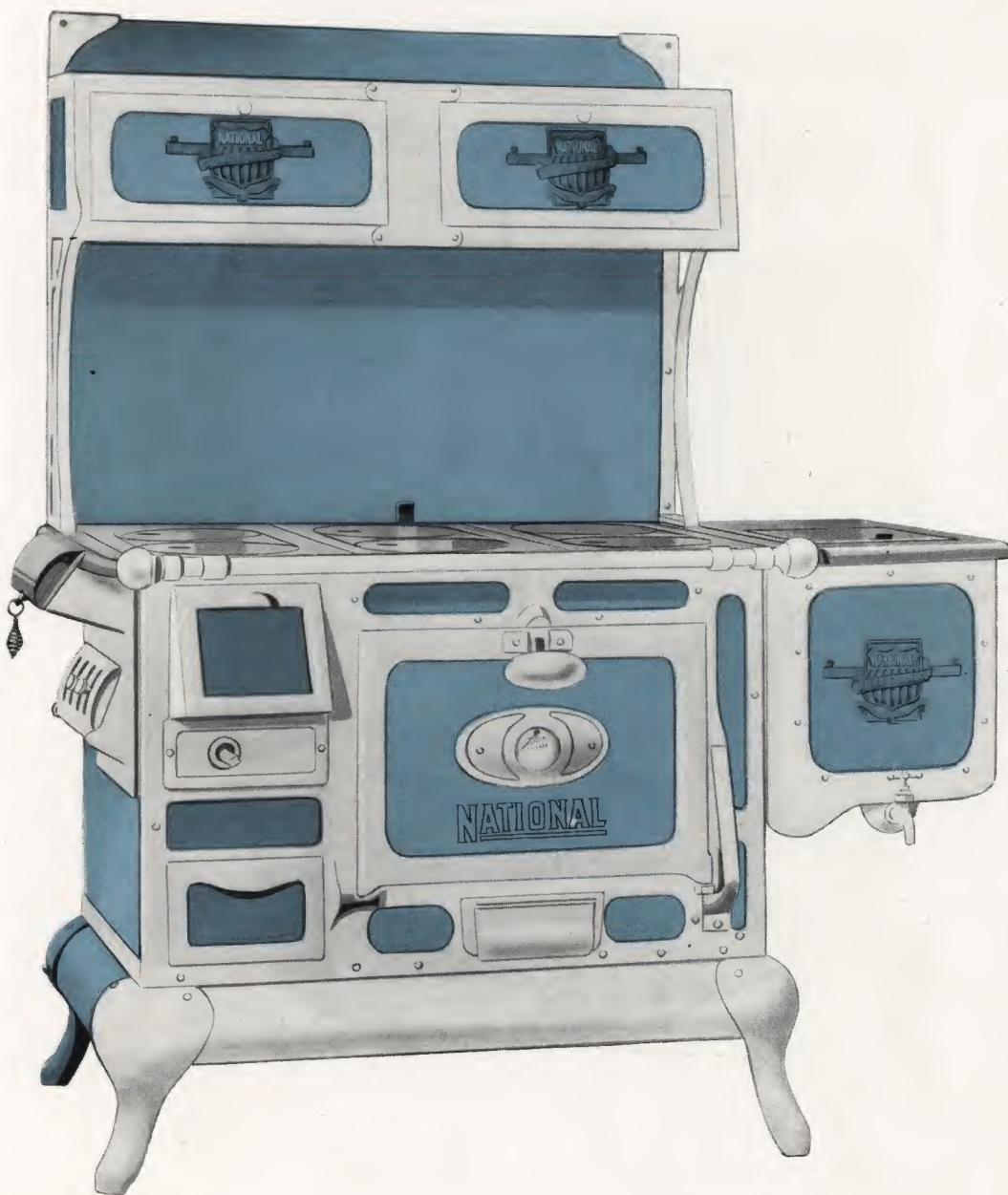
Square with High Closet

Description, Pages 42-43

NOTE—Can be furnished in White Enameled. See net price list

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Steel Range, Blue Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Deluxe National

S E R I E S B

With Reservoir and High Closet

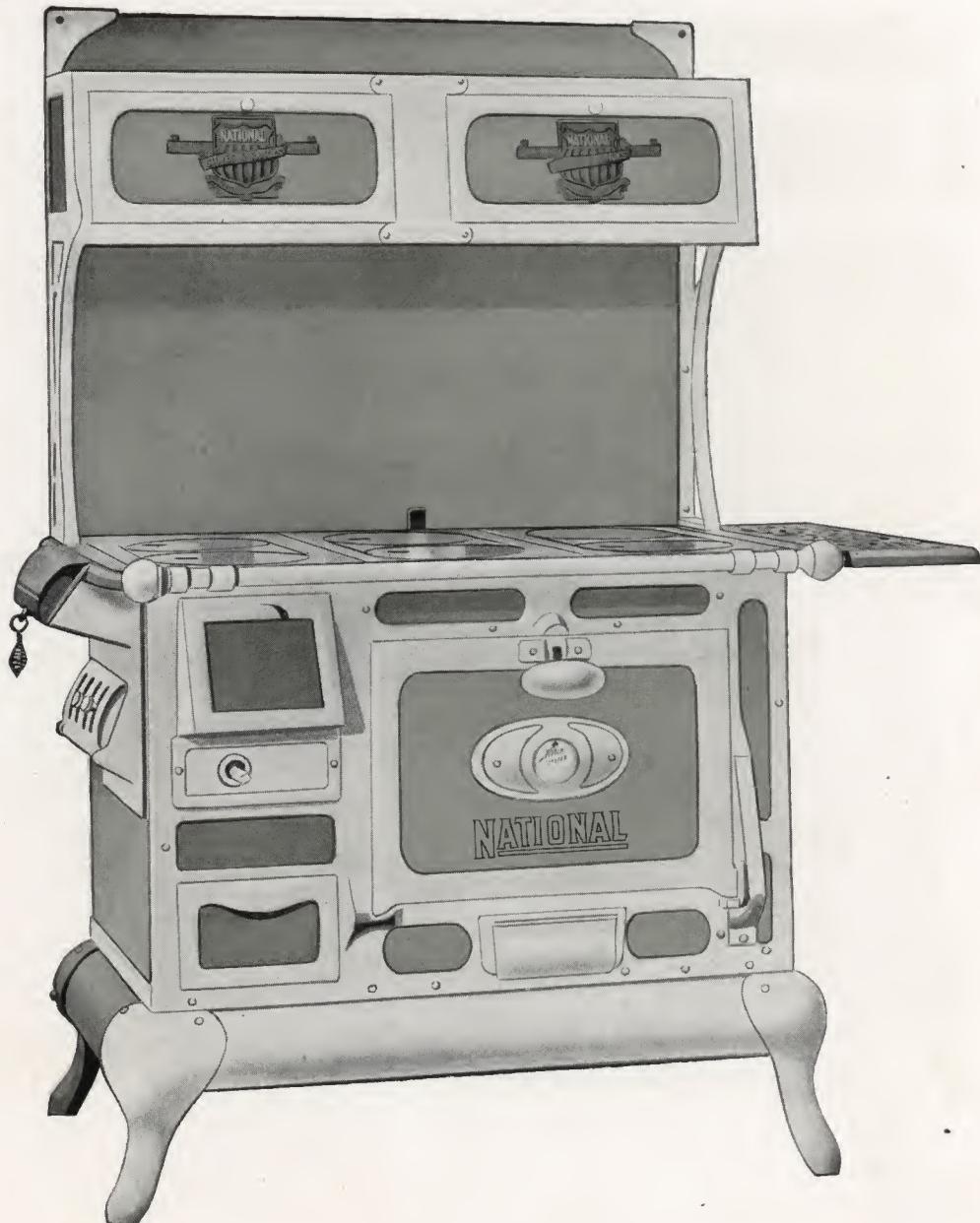
Description Pages 42-43

NOTE—Can be furnished in White Enameled. See net price list

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Steel Range, Gray Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Deluxe National

S E R I E S G

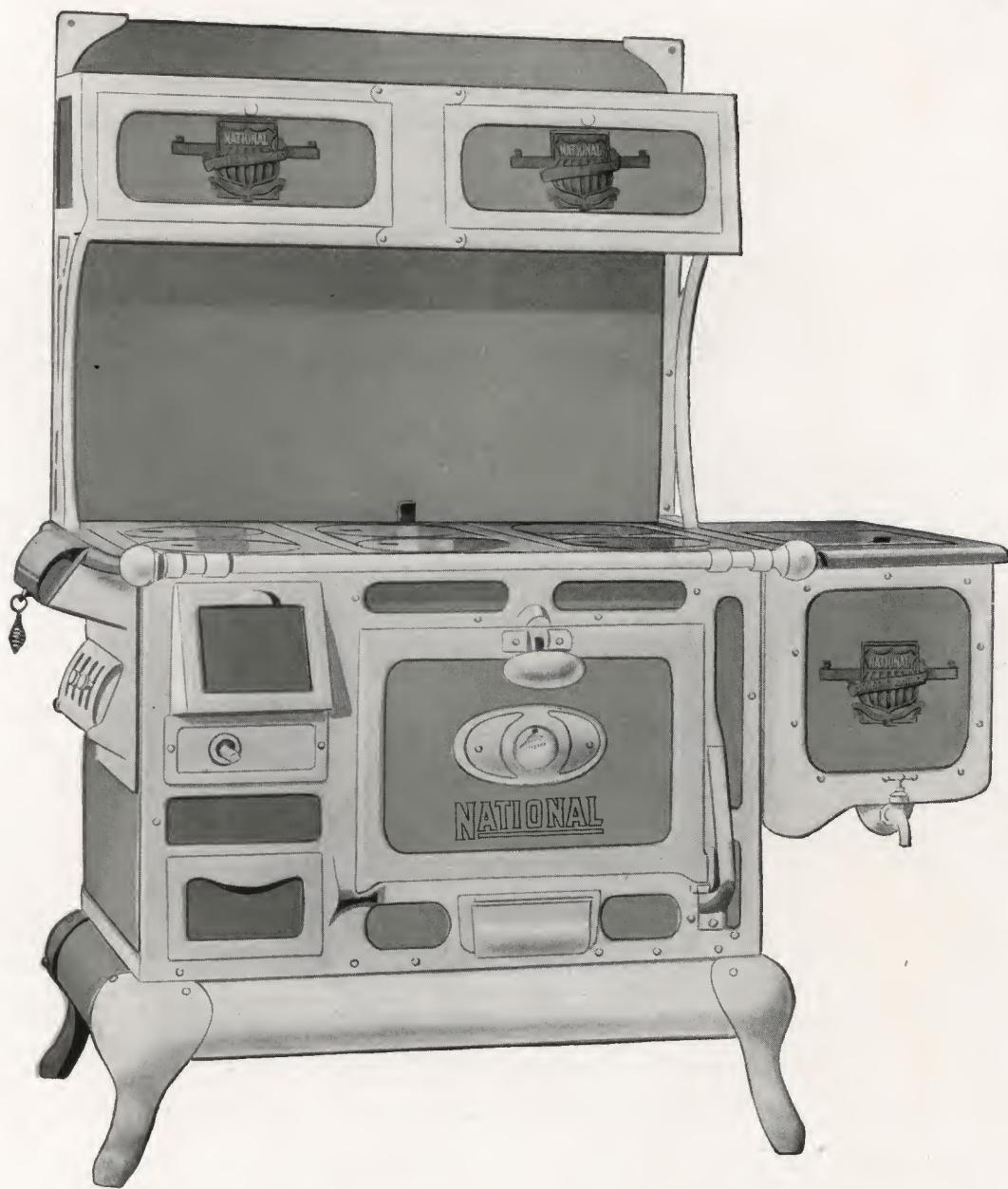
Square with High Closet

Description, Pages 42-43

NOTE—Can be furnished in White Enameled. See net price list

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Steel Range, Gray Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Deluxe National

S E R I E S G

With Reservoir and High Closet

Description, Pages 42-43

NOTE—Can be furnished in White Enameled. See net price list

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

Deluxe National Steel Range

For Hard Coal, Soft Coal or Wood

With Polished Top

Construction — The range Everlasting. Enameled in blue, gray and white finish. Fully Porcelain Enameled Armeo Ingots Iron Range for hard coal, soft coal or wood. With pouch feed, high closet, contact reservoir, sanitary leg base and polished top.

A popular priced Porcelain Enameled Armeo Ingots Iron Rust Resisting Range, coated both inside and out with porcelain enamel. An extra coat of blue flaked with white, or gray as the case may be, is also applied to the outside body and panels, making three coats of porcelain in all. The porcelain enamel is fused into the Armeo Ingots Rust Resisting Iron under a very high degree of heat and becomes a part of the iron itself. It is elastic, it expands, contracts and bends with the iron and will not chip, crack or break. It cannot rust or corrode. Is impervious to the grease and acids and all other chemical action arising from the burning of hard coal, soft coal or wood and in fact is a Rust Proof, Sanitary, Durable Range and as easy to keep clean as a piece of china.

Oven — Sheet flue system with extra large 3½-inch flues adapted for the use of hard coal, soft coal or wood. The sides and top of oven are made from 16 gauge; the bottom of oven from 14 gauge Armeo Ingots Rust Resisting Iron, fully enameled inside and out. The back flue is also enameled on both inside and outside.

Body — The body is made from 18 gauge Armeo Ingots Rust Resisting Iron, fully enameled inside and outside.

Top — The top is cut into four sections, provided with heavy key plates, covers, centers and substantial center rest. Large end feed door for wood, large sheet steel ash pan.

Fire Box — Heavy cast iron linings, fire box extension to accommodate long lengths of wood; duplex grate for coal. Reversing grate forms a perfect wood grate. Three section ventilated fire back.

Reservoir — Made of all copper, tinned inside. Heats by contact, i. e., the entire front of reservoir lays close against the back of the range and absorbs the heat continuously. There is no opening in the range back and requires no reservoir damper. Therefore this system cannot interfere with perfect baking. Has enameled end, polished cast top and cover. Can be attached to square top of range by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently. The reservoir boiler capacity is 10 gallons.

Water Heater — Arranged for figure 23 Two Pipe Water Front Coil of ample capacity.

High Closet — Made of Armeo Ingots Rust Resisting Iron, enameled in blue, gray or white and highly nickel trimmed.

Triple Plated Nickel Trimmings — Main front, oven door frame, oven door handle, oven door thermometer panel, oven door spring pocket cover, clean out door, fire door frame, ash door frame, name plate, reservoir end frame, towel bar, grate shaker and cover lifter, front door damper, two front nickel legs, front long nickel base strip, high closet brackets, high closet doors, high closet door frames, high closet front, high closet top corners, bottom edge and reservoir faucet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Deluxe National

Porcelain Enameled Steel Range

For Hard Coal, Soft Coal or Wood

With Polished Top

Detail

Number	Holes	Ovens	*Top surface		SHIPPING WEIGHTS With High Closet	
			Square	Reservoir	Square	Reservoir
8618	Six 8 inch	18x20½x12¼	24½x41	24½x47	500	530
9618	Six 9 inch	18x20½x12¼	24½x41	24½x47	503	533
8620	Six 8 inch	20x20½x12¼	24½x43	24½x49	515	545
9620	Six 9 inch	20x20½x12¼	24½x43	24½x49	518	548

Prices

(See net price list)

With High Closet

Number	Style	Square	Code Word	Copper Reservoir	Code Word
8618B	Blue Enameled	\$.....	Mediocre	\$.....	Memento
9618B	Blue Enameled	.....	Meditate	.....	Memoir
8620B	Blue Enameled	.....	Medium	.....	Memorable
9620B	Blue Enameled	.....	Medley	.....	Memorial
8618G	Gray Enameled	.....	Meed	.....	Memory
9618G	Gray Enameled	.....	Megrin	.....	Menace
8620G	Gray Enameled	.....	Melange	.....	Menial
9620G	Gray Enameled	.....	Meliorate	.....	Mental
8618W	White Enameled	.....	Mellow	.....	Mention
9618W	White Enameled	.....	Melodize	.....	Mentor
8620W	White Enameled	.....	Melody	.....	Mercer
9620W	White Enameled	.....	Member	.....	Merciful

Water Heater fitted in Range, Fig. 23	Extra	\$.....	Code Word
Water Heater Separate from Range, Fig. 23	Extra	.....	Watery Water

*Top Surface measurements include Back top shelf on Square Ranges. Water Heater described on Page 11.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range
Regular Iron Finish

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Perfection National

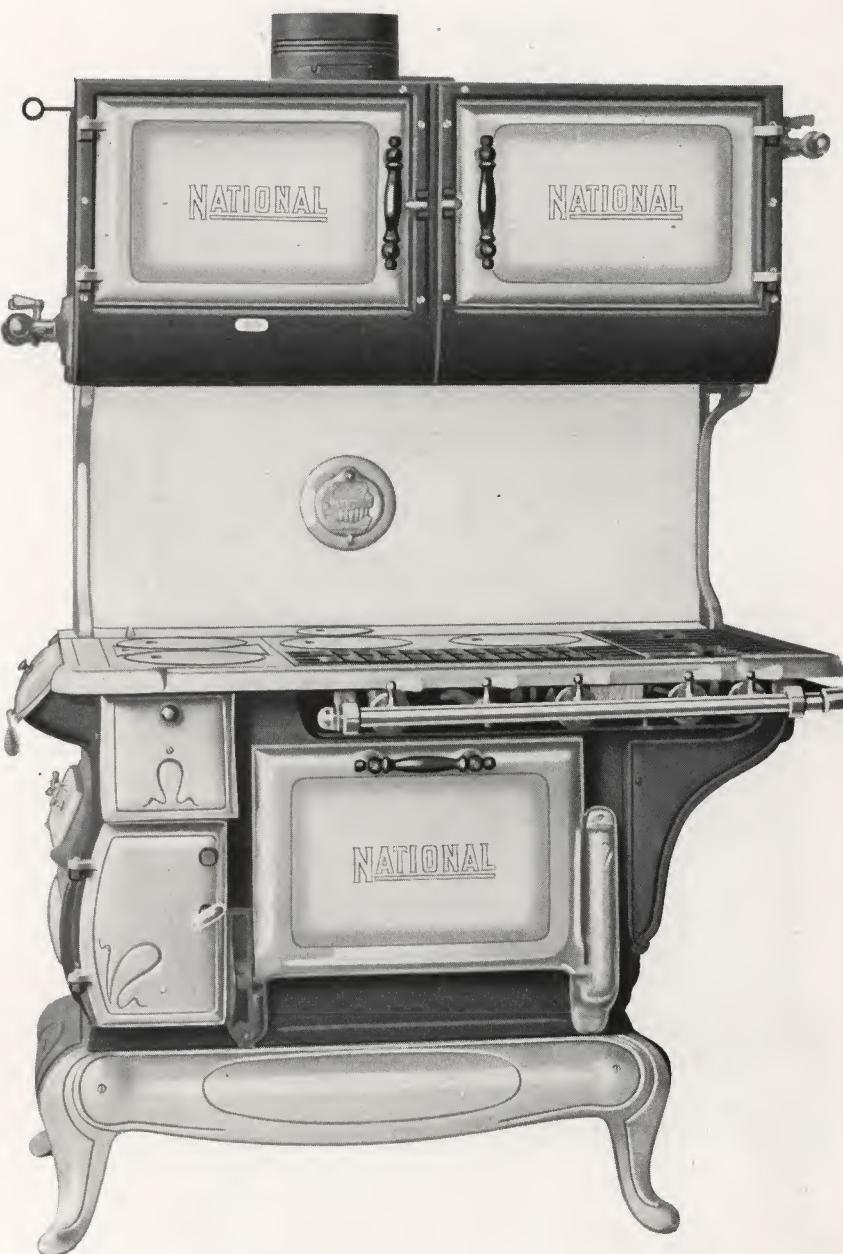
S E R I E S E

With Elevated Oven and Shelf

See Description, Pages 50-51

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Range
Regular Iron Finish

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Perfection National

S E R I E S E

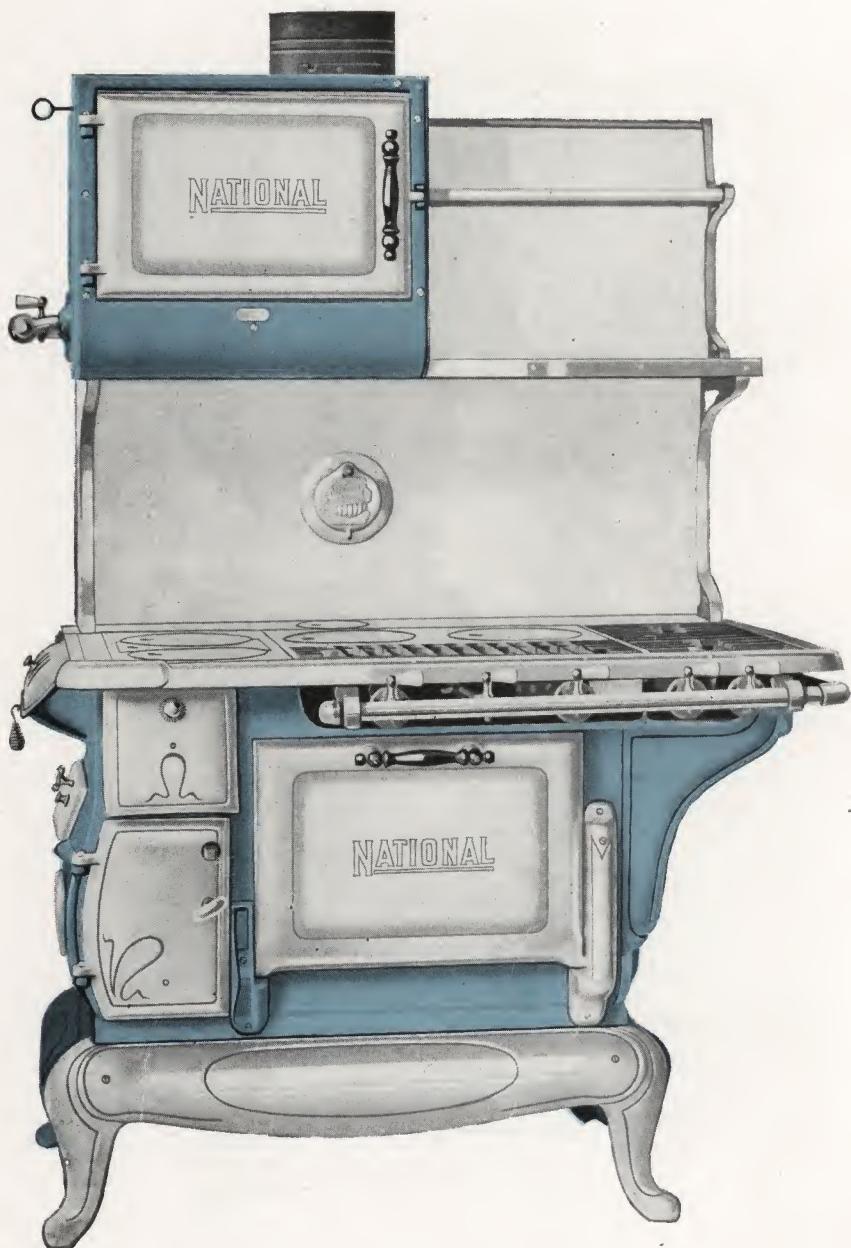
With Elevated Oven and Broiler

Description, Pages 50-51

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range
Blue Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

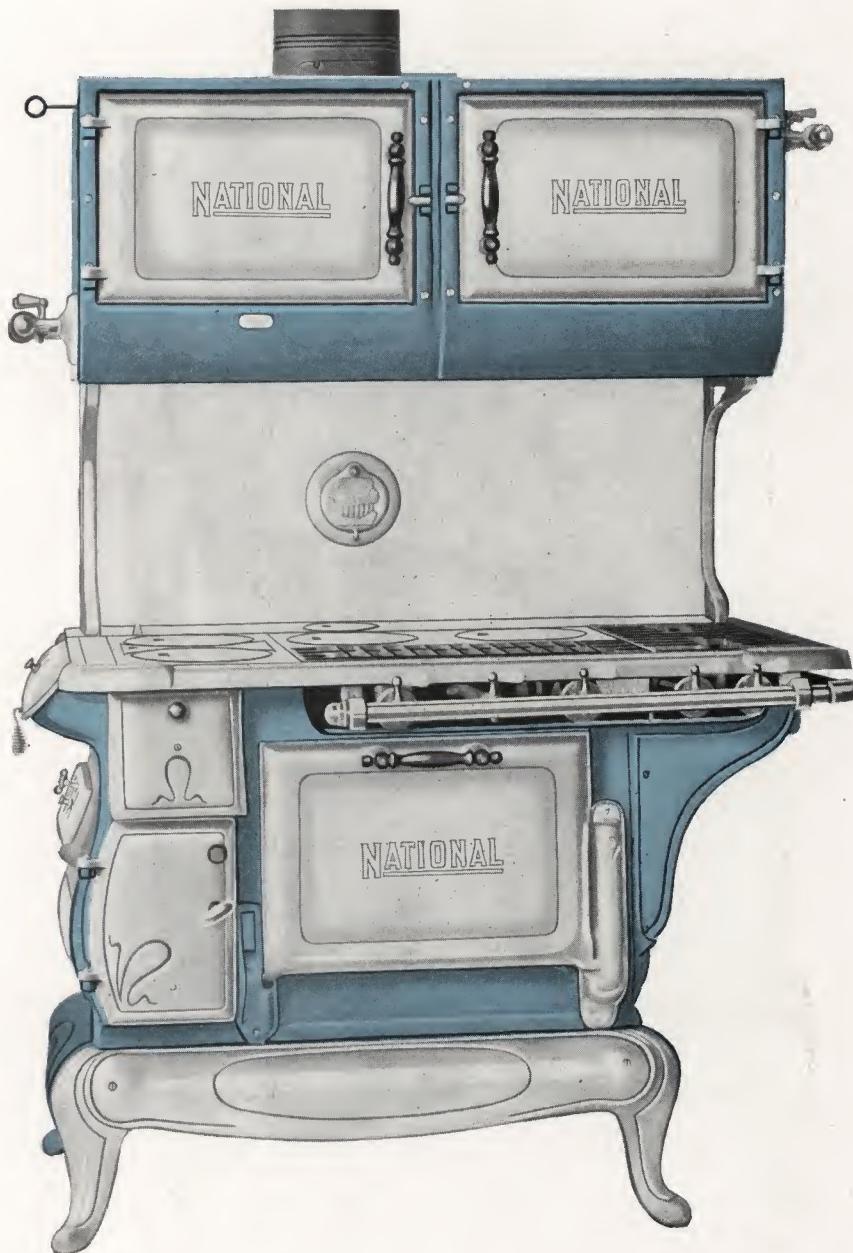
Perfection National

SERIES F
With Elevated Oven and Shelf

Description, Pages 50-51

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Range
Blue Porcelain Enamelled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Perfection National

S E R I E S F

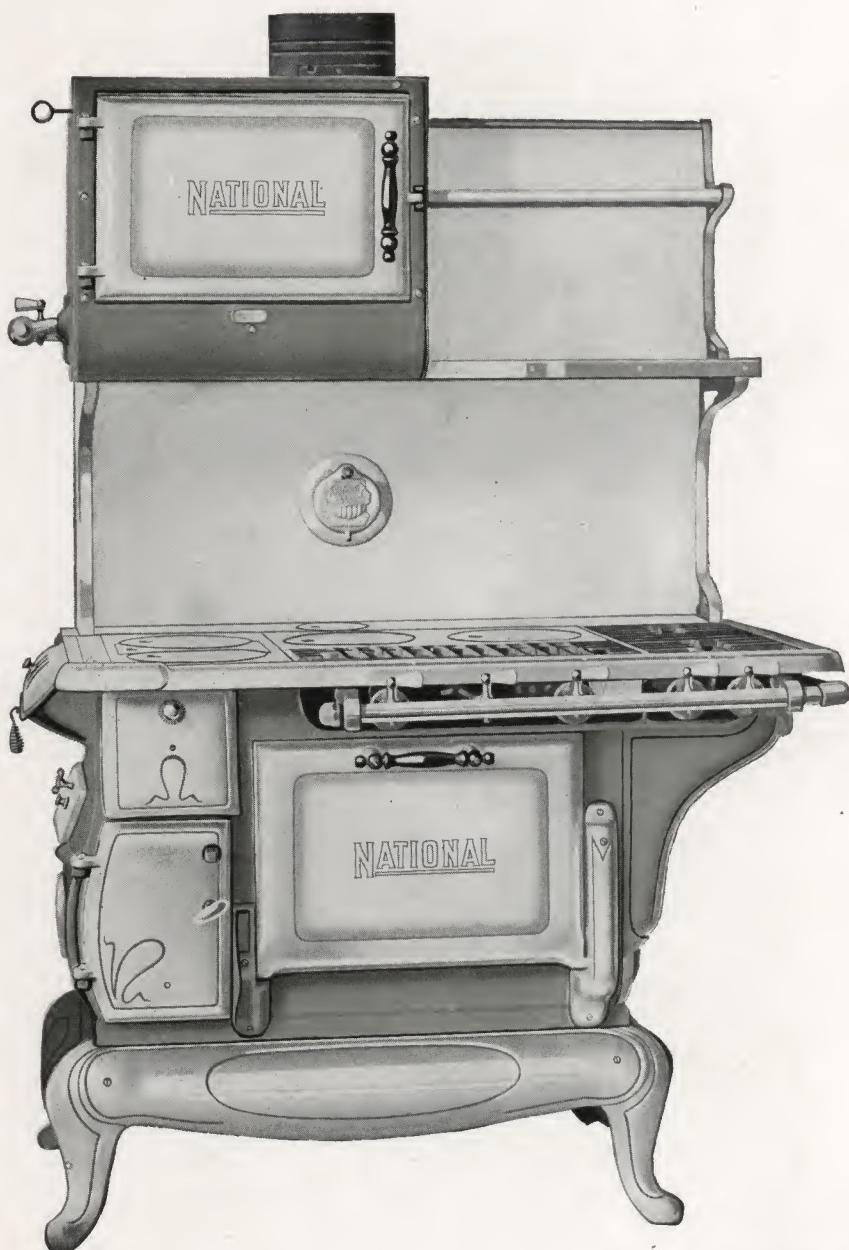
With Elevated Oven and Broiler

Description Pages 50-51

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range
Gray Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Perfection National

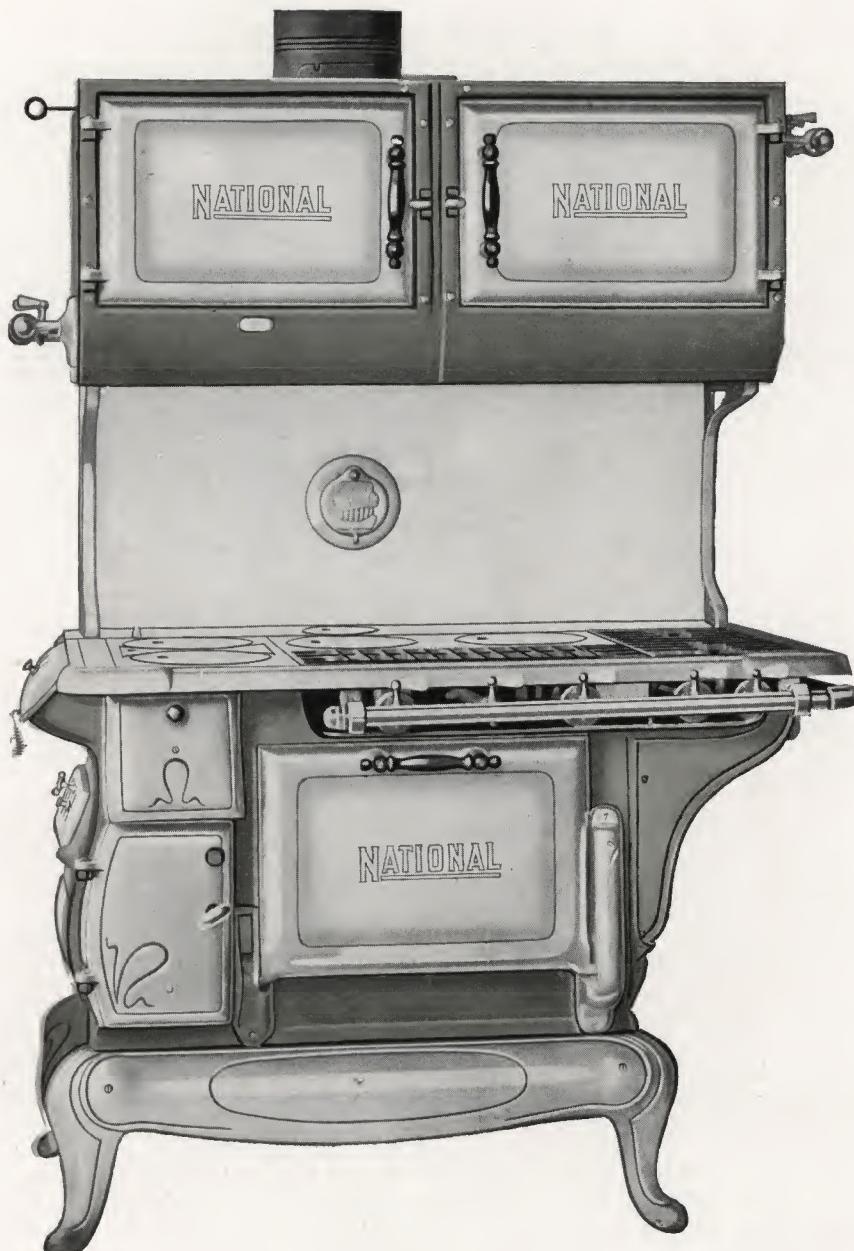
S E R I E S G

With Elevated Oven and Shelf

Description Pages 50-51

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Range
Gray Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Perfection National

S E R I E S G

With Elevated Oven and Broiler

Description, Pages 50-51

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Perfection National

For Hard Coal, Soft Coal, Wood, Manufactured or Natural Gas

With Polished Top

Construction — This range uses any kind of solid fuel, manufactured or natural gas. It has four coal holes, four gas burners and one simmering burner on top, both gas and coal may be used at the same time. Built with our special two flue system which is amply large for soft coal or wood.

Detachable cast elbow back of elevated oven, allowing the range to pass through an ordinary door opening.

Ovens — The Gas Oven is elevated and ventilated into smoke pipe, it has cast iron linings, cast front and cast iron bottom oven plate with 7 in. cooking hole. Two oven burners operated with separate valves, and pilot lighter, porcelain enameled door panel. The Oven is thoroughly insulated with asbestos and reinforced with steel lining. Wire oven rack. Entire inside aluminized. The Coal Oven has no gas attached, it operates separately with coal or wood fire. It is provided with a wire oven rack. The operation of the Oven Burners in Gas Oven is visible through Mica Panel in end Burner Plate.

Fire Box — Extra heavy cast iron linings, fire box extension for long length wood. National Duplex Grate for coal or wood. Reversing the coal grate forms a perfect wood grate fitted with our wonderful porcupine fire back, which is guaranteed for twenty-five years.

Damper — Sliding direct draft damper, operates on top of range; it can be regulated open or shut to required draft. A slide damper is provided between the coal and gas section which should be opened when using natural gas. Slide dampers operated by rods on top of Elevated oven and broiler must be open when baking with gas and closed to bake with coal. Check damper in smoke pipe operates through the splasher back.

Broiler — Elevated broiler ventilated into smoke pipe, it has cast lining, two burners operated with separate valves and pilot lighter. Porcelain enameled broiler pan and wire broiler rack. The operation of the broiler Burners is visible through Mica Panel in end Burner Plate.

Water Heater — Arranged for two-pipe water back coil and Cast Water "L" front. Our system heats most water and does not interfere with the baking.

Aluminized Parts — Inside Coal Oven, Gas Oven and Broiler.

Nickel Parts — Oven door, fire door, ash door, draft door, spring pocket, oven door hinge, name plate, front top edge, manifold pipe, two legs and one long base strip, check damper, grate shaker and keys. Elevated oven and broiler parts, brackets, and door frames.

Porcelain Enamel Parts — E Series has White Porcelain Enamel Coal Oven door panel, Elevated oven door panel, Broiler door panel and splasher back. Aluminized scavenger pans. F and G Series—Main bottom, front, left end, right end, two legs, one long base strip, two short base strips, Broiler front, elevated oven front. White Coal Oven door panel, elevated oven door panel, broiler door panel, elevated oven ends, broiler ends, elevated shelf, splasher back, and scavenger pans.

Top Arrangement — When furnishing this range for the use of Manufactured Gas, we supply the top with four Cooking Covers over the coal section and spider grates over the gas section.

For the use of Natural Gas, we furnish the top with cooking covers over the entire top making eight eight-inch holes, a slide damper under the gas top may be opened to allow the gas fumes to enter the chimney flue instead of escaping into the room.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Showing open view of Gas Oven and Broiler

Perfection National

Cast Range, Elevated Oven

**For Hard Coal, Soft Coal, Wood, Manufactured or Natural Gas
With Polished Top**

Detail

No.	Holes Coal	Holes Gas	Gas Oven	Gas Broiler	Coal Oven	Top Surface	SHIPPING Without Broiler	WEIGHT With Broiler
8618	Four 8 inch	4	18x17x11 1/4	18x17x11 1/4	18x18x12 1/2	28x44	700	788

Prices

(See Net Price List)

For Manufactured Gas

No.	Style	Elevated Oven and Shelf	Code Word	Elevated Oven and Broiler	Code Word
8618E	Regular Iron Finish	\$.....	Clump	\$.....	Clutch
8618F	Blue Enameled	.....	Clumsy	.....	Clutter
8618G	Gray Enameled	.....	Cluster	.....	Coach

For Natural Gas

No.	Style	Elevated Oven and Shelf	Code Word	Elevated Oven and Broiler	Code Word	Code Word
8618E	Regular Iron Finish	\$.....	Coactive	\$.....	Course	Wordy
8618F	Blue Enameled	.....	Coaction	.....	Coaster	Work
8618G	Gray Enameled	.....	Coadjutor	.....	Coasting	Wily
						Wince
						Wattle

Cast Water "L" Front fitted in Range Fig. 29..... Extra \$..... Wordy
 Cast Water "L" Front separate from Range Fig. 29..... Extra Work
 Water Front Coil fitted in Range Fig. 23..... Extra Wily
 Water Front Coil separate from Range Fig. 23..... Extra Wince
 Two pipe Water Back Coil, Fig. 26..... Extra Wattle
 Water Heater described on page 11.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard or Soft Coal, Wood,
Manufactured and Natural Gas

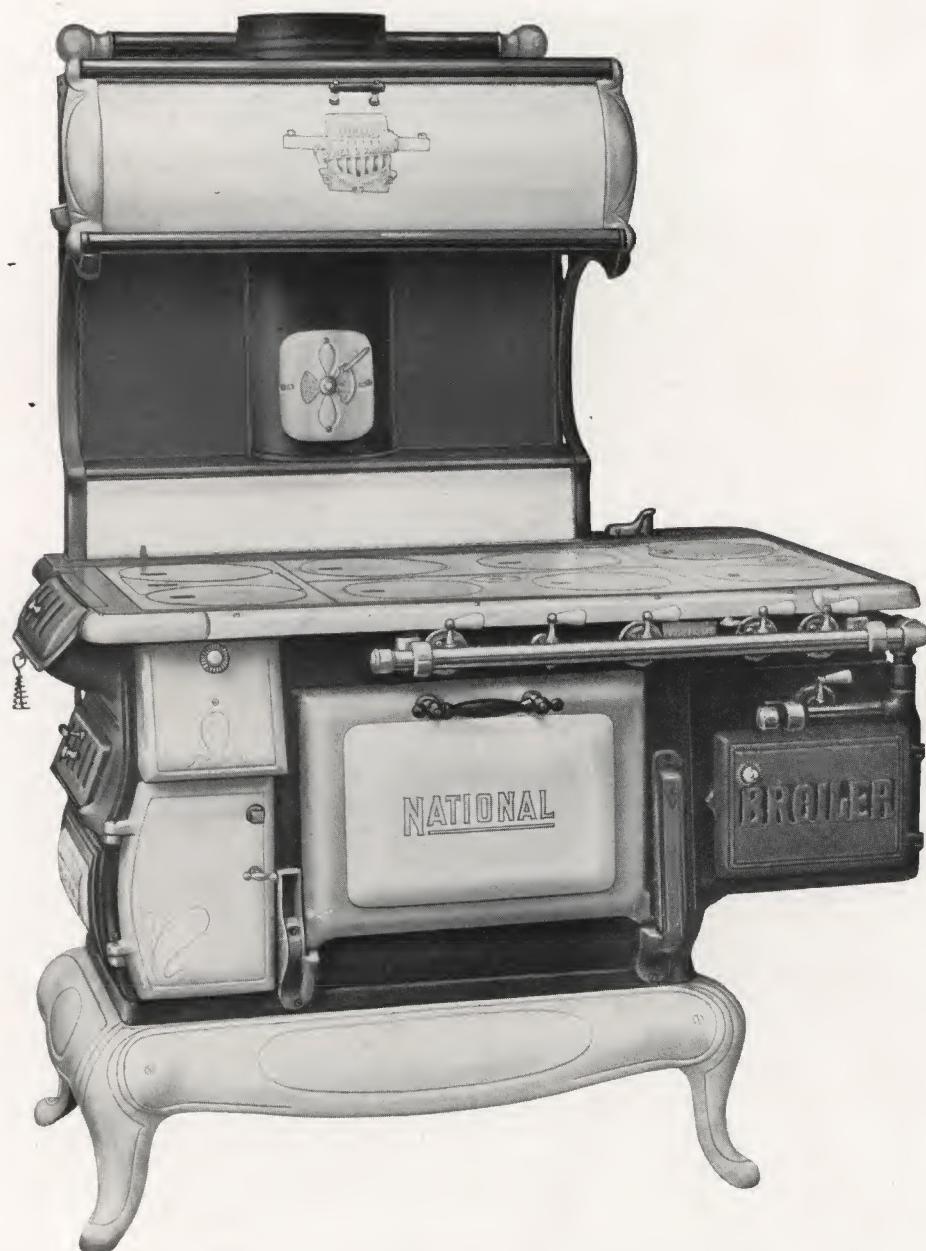
Combination National

WITH HIGH CLOSET

Description, Pages 54-55

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Range

For Hard or Soft Coal, Wood,
Manufactured and Natural Gas

Combination National

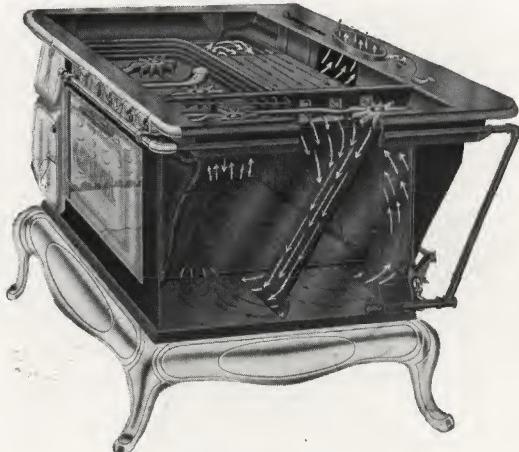
WITH HIGH CLOSET AND BROILER

Description, Pages 54-55

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



X-Ray View

Showing flue system for coal and heat travel of gas

Combination National

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

Construction — This range uses any kind of coal, manufactured or natural gas. Consisting of four coal holes, four gas burners and one simmering burner on top, making a nine burner cooking stove when occasion demands. The oven burner may also be used with gas in addition to the coal fire if desired. There are no gas burners in the oven, the oven being strictly free from all obstructions. The gas burners are located outside the oven, these consist of a large "L" shaped burner. The stem of the "L" is located in the rear of the stove inside a burner box; the arm of the "L" is located in a housing between the oven and the ash pit. The gas flames of the oven burners do not enter the oven, however; all the heat from these burners discharges into the oven through the fretwork on the rear and left end of the oven. An opening in the right front end of the oven allows the burner heat to escape into the flues and out of the chimney; this feature draws the heat forward and downward in the oven equalizing the temperature and at the same time ventilating the oven.

There is nothing to take out of the oven or put into it to use either gas or coal; no burners to move or change, no heavy plate to take out of the oven. When baking with gas place the cast iron oven rack on the lowest supports being the only required change from coal to gas. One lever located on range top operates the entire gas oven equipment. This lever, when moved to the right, turns on the gas supply; at the same time it opens the air ports to the gas burners and also opens the vent from the oven. Then turning the lever to the left closes off gas, etc., and automatically locks the parts in a closed position.

To light the gas oven burners, the oven door must be opened to gain access to the burners, thereby eliminating all danger of gas explosions in the oven.

The coal part of the range is built on the two-flue principle; the flues are amply large for soft coal or wood. The entire structure is strictly first class in every respect. Provided with aluminized scavenger pans under the gas burners.

The top on the range, when used for manufactured gas is provided with two key-plates over the coal section, and two gratings over the gas section. For natural gas, the entire top is covered with four key-plates; the two used over the gas section have sectional covers composed of a ring cover with a small center cover. We also supply the natural gas top with two extra spiders that fit the gas holes for ironing, etc.

Oven — Strictly square, high and roomy, with substantial and ornamental oven rack. The oven door panel is porcelain enameled. Oven door is provided with a wood handle and spring for ease in operation.

The entire inside of oven is aluminized.

Fire Box — Extra heavy cast linings, fire box extension for long lengths wood. National duplex grate for coal or wood. Fitted with our wonderful porcupine fire back which is guaranteed for twenty-five years.

Damper — Sliding direct draft damper operates on top of range; it can be regulated open or shut to required draft. A slide damper is provided between the coal and gas section which should be opened when using the broiler or natural gas.

Broiler — The broiler section is fitted with a powerful loop burner, porcelain enameled broiler pan and tinned wire rack. This broiler can not be fitted to range which is sent out without the broiler attached, since the gas pipe connections are made up special where broiler is used.

Water Heater — Arranged for two-pipe front water coil, or two-pipe water back coil and water "L" front. Our system heats most water and does not interfere with the baking.

High Closet — This is our latest creation of drop door closet with porcelain enameled door panel and splash guard. This design provides a flat shelf the entire width of the closet instead of the usual drop shelves. On the left end of closet there is a nickelized match safe, a convenience for the user.

Triple Plated Nickel Trimmings — Oven door, fire door, ash door, name plate, legs and three skirtings, front top edge, gas manifold, shaker and cover lifter, closet ends, balustrade ends, pipe damper and match safe on high closet.

National Stoves, Ranges and Furnaces



Combination National

Cast Range

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

With Key Plates, Covers and Centers Polished

Detail

Number	Holes Coal	Holes Gas	Oven	Top Surface	SHIPPING WEIGHTS			
					With Square	Balustrade Broiler	With Square	High Closet Broiler
8185	Four 8-inch	4	18x18x12½	28x44	530	560	590	620
8186	Four 8-inch	4	18x18x12½	28x44	540	570	600	630

Prices

(See net price list)

For Manufactured Gas with Spider Top

Number	Square and Balustrade	Code Word	Broiler and Balustrade	Code Word	Square and High Closet	Code Word	Broiler and High Closet	Code Word
8185	\$.....	Cirrous	\$.....	Citadel	\$.....	Cistern	\$.....	Citation

For Natural Gas with Keyplate Top and Covers

Number	Square and Balustrade	Code Word	Broiler and Balustrade	Code Word	Square and High Closet	Code Word	Broiler and High Closet	Code Word
8186	\$.....	Citatory	\$.....	Citric	\$.....	Citizen	\$.....	Citrine

Cast Water "L" Front fitted in Range, Fig. 29	extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29	extra	.....	Wordy
Water Front Coil fitted in Range, Fig. 23	extra	.....	Work
Water Front Coil separate from Range, Fig. 23	extra	.....	Wily
2-Pipe Water Back Coil, Fig. 26	extra	.....	Wince
High Closet ordered separate from Range	extra	.....	Wattle
If wanted without Balustrade	deduct	.....	Writhe
		.....	Wild

Water Heaters described on Page 11.

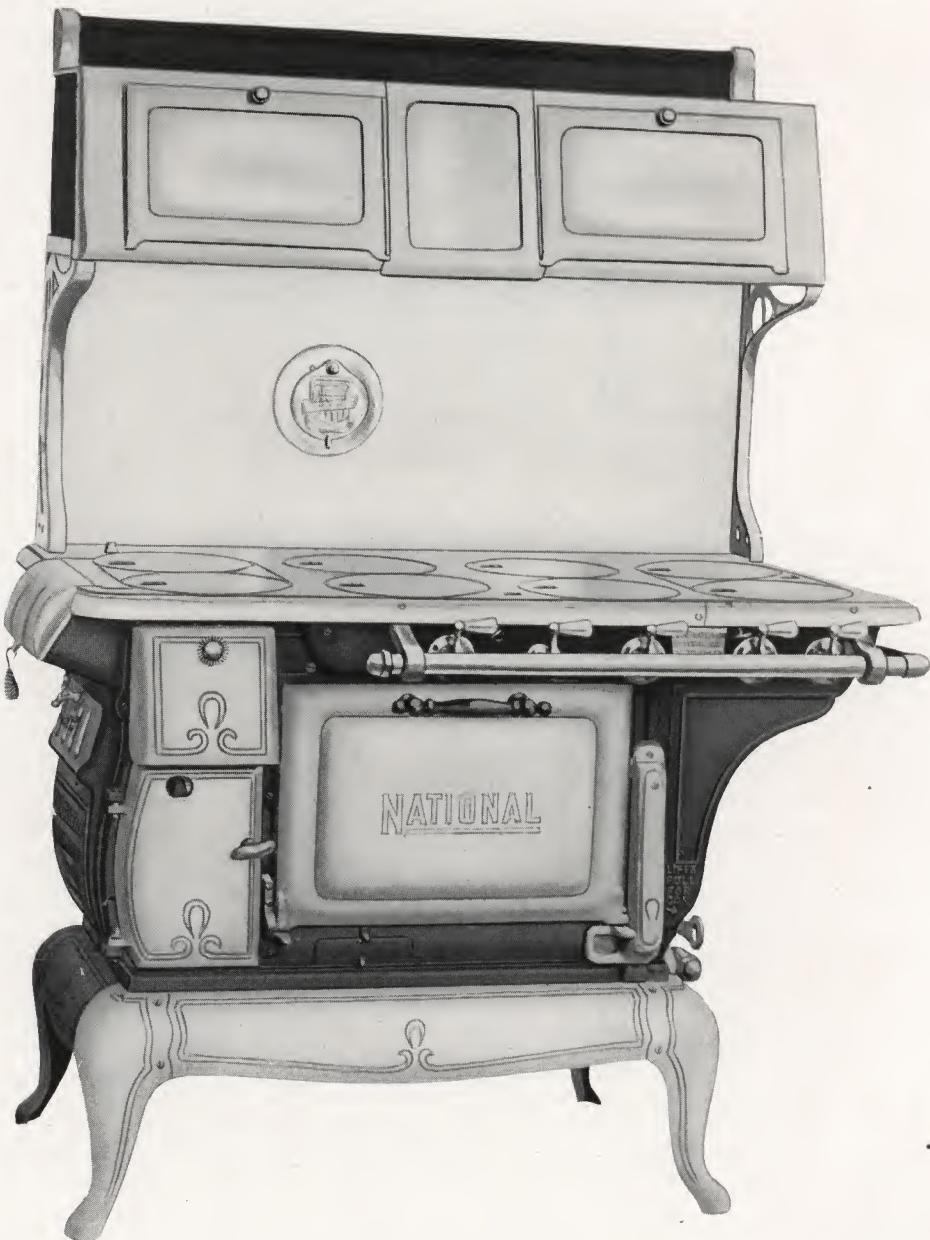
Balustrade described on Page 21.

NOTE—The Natural Gas Range may be used for either gas; the manufactured Gas only.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range
Regular Iron Finish

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

S E R I E S E
Square with High Closet

Description, Pages 62-63

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Range
Regular Iron Finish

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

S E R I E S E

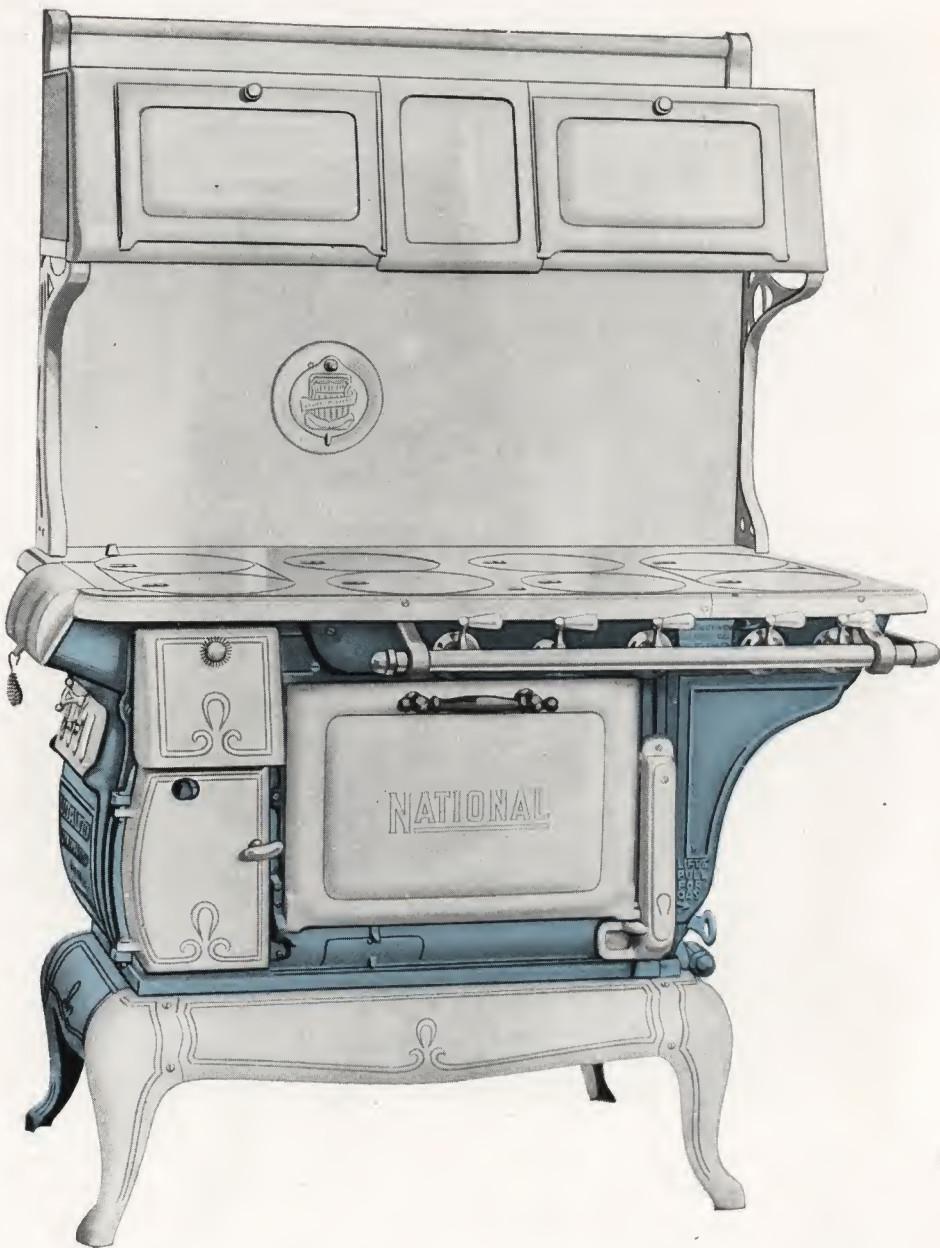
With Broiler and High Closet

Description, Pages 62-63

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range
Blue Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

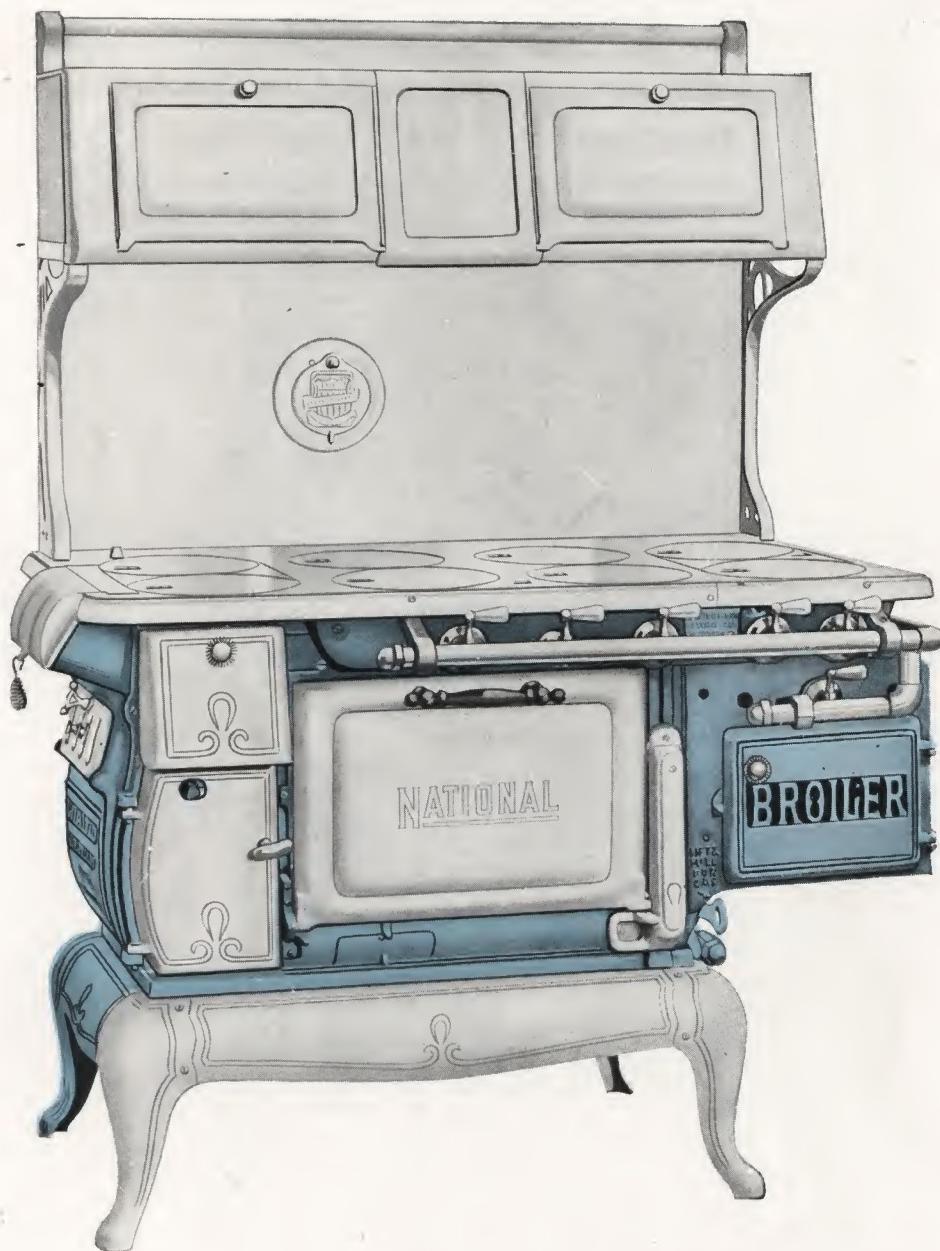
S E R I E S F

Square with High Closet

Description, Pages 62-63

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Range
Blue Porcelain Enameling

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

S E R I E S F

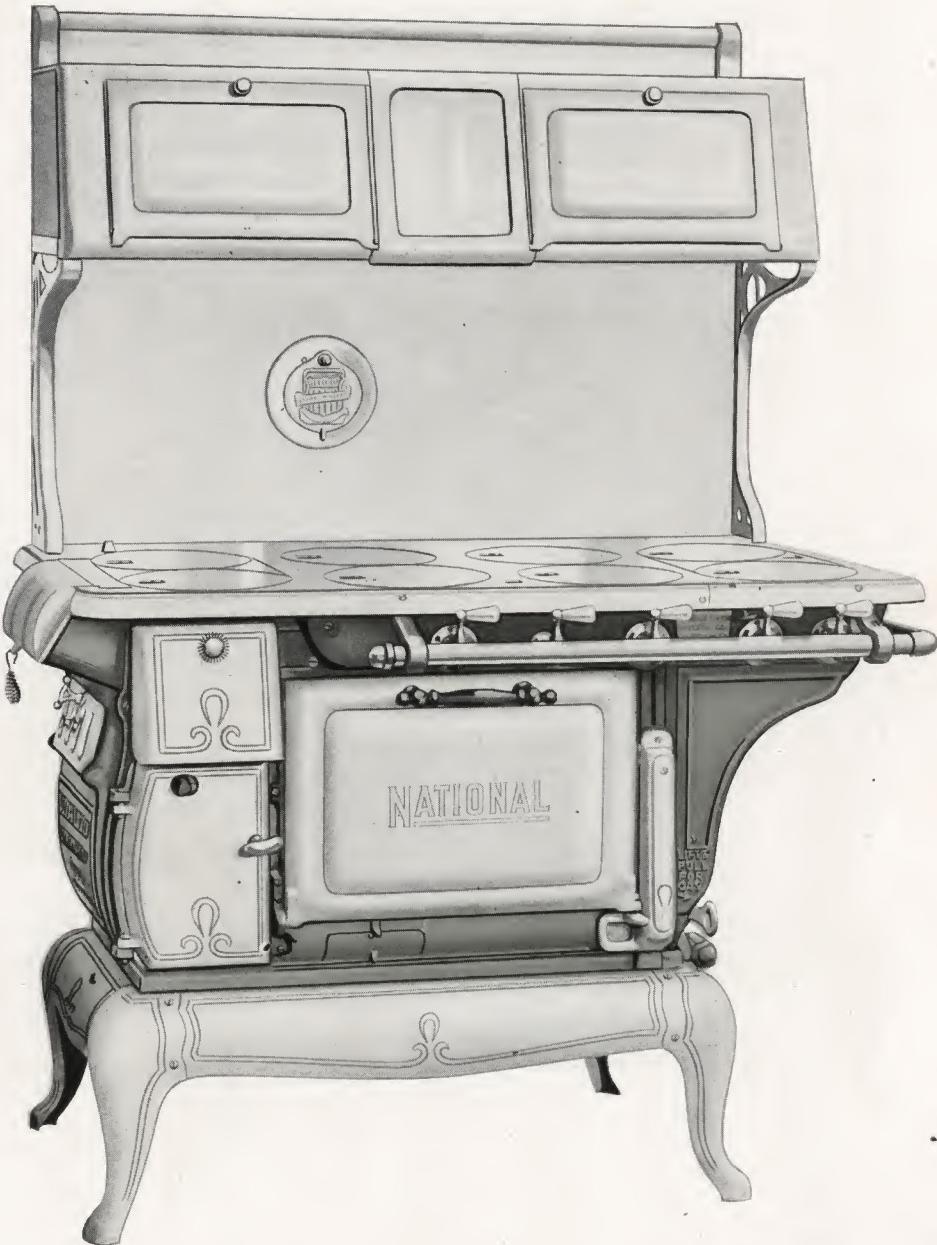
With Broiler and High Closet

Description, Pages 62-63

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range
Gray Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

S E R I E S G

Square with High Closet

Description, Pages 62-63

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Range
Gray Porcelain Enameled

For Hard Coal, Soft Coal, Wood,
Manufactured or Natural Gas

Comfort National

S E R I E S G

With Broiler and High Closet

Description, Pages 62-63

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Comfort National

E. F. G. SERIES

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

Construction—This All-Cast Range is complete for any kind of solid fuel, in addition to Manufactured or Natural Gas. It is provided with four cooking holes for coal and four cooking holes for gas, with a gas simmering burner. All holes are provided with regular stove covers. When cooking with gas, remove the cover and set the cooking vessel over the hole, the surplus heat will travel under the gas section of the top instead of escaping, thereby forming a hot-plate for heating additional vessels. We include with each Range two single spider covers for use of small vessels on gas flame. Scavenger pans under the top burners insures cleanliness.

Oven—The oven is perfectly square, it has no obstructed corners, no baffle plate or burners to remove, no changes to make to use either coal or gas. The gas may be used in the oven while coal fire is used. The coal flues are under the oven, the gas burner is located below the coal flue. Heat from the gas burner enters the oven, at both front and back (the same as a regular gas stove). The gas heat is circulated in the oven and discharged into the smoke flue of Range after passing through the vent opening in the rear of oven. Inside of oven aluminized. When baking with gas, use the oven shelf placed at the lowest position. For coal use the oven bottom same as any other coal Range. To light oven gas burner hold lighted match at small hole in the right front end of bottom oven-plate—the burner will light automatically at both back and front. Mica in lower right-hand corner of Range makes the oven burner visible while burning.

Oven Operation—The gas burner for the oven is operated with the "Handle Bar" located at the right end of Range. This bar automatically locks the oven burner in a closed position and also closes off the vent opening in the rear of oven. To light oven burner, lift the bar and pull it forward, then apply match at "lighter-hole" in oven bottom which will light the gas burner at both ends.

The oven door must be opened to gain access to the lighter which avoids the possibility of gas explosion in the oven. **Gas**—Manufactured or Natural Gas may be used without any changes except the adjustable orifices, which require regulating to suit the gas pressure.

While we test every range before shipping, the variations in gas pressure due to location; requires that every Range must be regulated when installed, both as to gas supply and the air supply entering the air mixers at the end of each burner.

Flues—The coal flues are made on the two-flue system, which positions the coal holes and the gas holes in "L" shape; this arrangement locates three gas burners and the simmering burner directly in front of the operator, and avoids the necessity of reaching over the gas flame, as required on Ranges where the burners are placed in rectangular position. It has a cast elbow on back flue for the smoke pipe in rear of closet; this elbow fastens on with a Turn latch; it is detachable to allow the range to pass through an ordinary door opening.

Fire Box—Heavy cast linings, fire box extension for long lengths of wood. National Duplex Grate for coal or wood. Fitted with our wonderful porcupine fire back, which is guaranteed for 25 years.

Dampers—Sliding direct draft damper operates on top of range; it can be regulated open or shut to required draft. A sliding damper is provided between the coal and gas sections, which should be opened when using the broiler or Natural Gas. This sliding damper, which operates by a "Ring Pull" near the gas manifold may also be used as a check damper for coal fires. Check damper in smoke pipe operates through the splasher back.

Broiler—The Broiler section is fitted with a powerful loop burner porcelain enameled broiler pan and tinmed wire rack. This broiler cannot be fitted to range which is sent out without the broiler attachment, since the gas pipe connections are made up special where broiler is used.

Water Heater—Arranged for two-pipe water back coil, or water "L" front. Our system heats most water and does not interfere with the baking.

Nickel Parts—Oven door, fire door, ash door, draft door, hinge pocket, left oven door hinge, gas manifold, two legs, one long base strip, high closet brackets, front drop doors, balustrade corners, check damper and knobs.

Porcelain Enamel Parts—E Series, Oven door panel, high closet door panels and splasher back. F. and G. Series. Main bottom, front, left end, right end, broiler front, door and back, two legs, one long base strip, two short base strips, scavenger pans, oven door panel. High closet door panels, ends, balustrade, top, splasher back; the closet bottom is glazed enamel.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Oven Construction
Comfort National Range
(See opposite page for description)

Comfort National

Cast Range With Polished Top

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

Detail

Number	Holes Coal	Holes Gas	Oven 17x18x11½	Top Surface 26x42	SHIPPING WEIGHTS		
					With Square	Balustrade Broiler	With High Square Broiler
8618	Four 8 in.	Four 8 inch			465	485	540 560

Prices

(See net price list)

With Porcelain Enameled Balustrade

Number	Style	Square	Code Word	With Broiler	Code Word
8618E	Regular Iron Finish	\$.....	Coating	\$.....	Cobbler
8618F	Blue Enameled	.....	Coaxer	.....	Cobweb
8618G	Gray Enameled	.....	Cobalt	.....	Corkade

With High Closet

Number	Style	Square	Code Word	With Broiler	Code Word
8618E	Regular Iron Finish	\$.....	Cocket	\$.....	Cockpit
8618F	Blue Enameled	.....	Cockle	.....	Cocklift
8618G	Gray Enameled	.....	Cockney	.....	Cockswain

Cast Water "L" Front fitted in Range, Fig. 29.....	Extra	\$.....	Code Word
Cast Water "L" Front Separate from Range, Fig. 29.....	Extra	.....	Wordy
2 Pipe Water Back Coil, Fig. 26.....	Extra	.....	Work
High Closet for Style E ordered separate from Range.....	Extra	.....	Wattle
High Closet for Style F or G ordered separate from Range.....	Extra	.....	Writhe
If wanted without Balustrade.....	Deduct	.....	Windage
Water Heaters described on Page 11.			Wild
Balustrade described on Page 21.			

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal, Wood,
Manufactured and Natural Gas

Comfort National

PLAIN SERIES
WITH HIGH CLOSET

Description, Pages 66-67

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal, Wood,
Manufactured and Natural Gas

Comfort National

PLAIN SERIES
WITH HIGH CLOSET AND BROILER

Description, Pages 66-67

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Comfort National

PLAIN SERIES

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

Construction — This All-Cast Range is complete for any kind of solid fuel, in addition to Manufactured or Natural Gas. It is provided with four cooking holes for coal and four cooking holes for gas, with a gas simmering burner.

All holes are provided with regular stove covers. When cooking with gas, remove the cover and set the cooking vessel over the hole, the surplus heat will travel under the gas section of the top instead of escaping, thereby forming a hot-plate for heating additional vessels. We include with each Range two single spider covers for use of small vessels on gas flame. Scavenger pans under the top burners insures cleanliness.

Oven — The oven is perfectly square, it has no obstructed corners, no baffle plate or burners to remove, no changes to make to use either coal or gas. The gas may be used in the oven while coal fire is used. The coal flues are under the oven, the gas burner is located below the coal flue. Heat from the gas burner enters the oven at both front and back (the same as a regular gas stove). The gas heat is circulated in the oven and discharged into the smoke flue of Range after passing through the vent opening in the rear of oven.

When baking with gas, use the oven shelf placed at the lowest position. For coal use the oven bottom same as any other coal Range. To light oven gas burner hold lighted match at small hole in the right front end of bottom oven-plate — the burner will light automatically at both back and front.

Mica in lower right-hand corner of Range makes the oven burner visible while burning.

Oven Operation — The gas burner for the oven is operated with the "Handle Bar" located at the right end of Range. This bar automatically locks the oven burner in a closed position and also closes off the vent opening in the rear of oven. To light the oven burners, lift the bar and pull it forward, then apply the match at the "lighterhole" in the oven bottom which will light the gas burner at both ends.

The oven door must be opened to gain access to the lighter which avoids the possibility of gas explosion in the oven.

Gas — Manufactured or Natural Gas may be used without any changes except the adjustable orifices, which require regulating to suit the gas pressure.

While we test every range before shipping, the variations in gas pressure due to location, requires that every Range must be regulated when installed, both as to gas supply and the air supply entering the air mixers at the end of each burner.

Flues — The coal flues are made on the two-flue system, which positions the coal holes and the gas holes in "L" shape. This arrangement locates three gas burners and the simmering burner directly in front of the operator, and avoids the necessity of reaching over the gas flame, as required on Ranges where the burners are placed in rectangular position.

Fire Box — Heavy cast linings, fire box extension for long lengths of wood. National Duplex Grate for coal or wood. Fitted with our wonderful porcupine fire back, which is guaranteed for twenty-five years.

Damper — Sliding direct draft damper operates on top of range; it can be regulated open or shut to required draft. A sliding damper is provided between the coal and gas sections, which should be opened when using the broiler or Natural Gas. This sliding damper which operates by a "Ring Pull" near the gas manifold may also be used as a check damper for coal fires.

Broiler — The Broiler section is fitted with a powerful loop burner porcelain enameled broiler pan and tinned wire rack. This broiler cannot be fitted to range which is sent out without the broiler attachment, since the gas pipe connections are made up special where broiler is used.

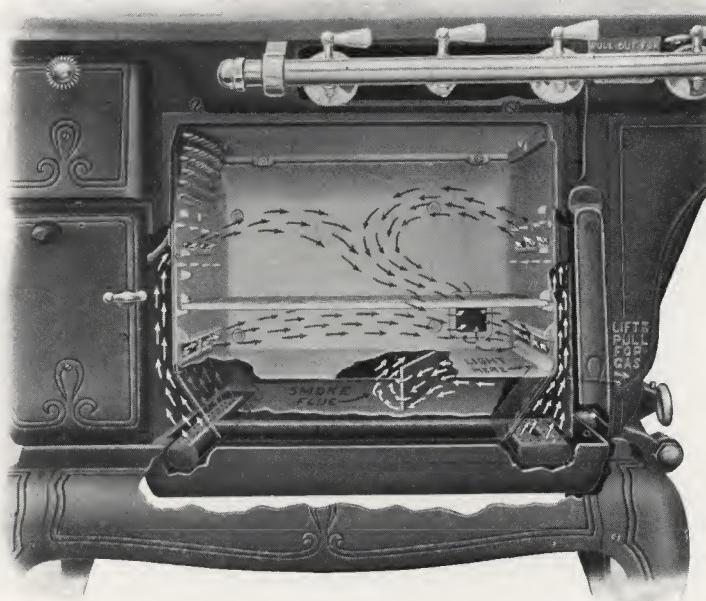
Water Heater — Arranged for two-pipe water back coil, or water "L" front. Our system heats most water and does not interfere with the baking.

High Closet — Made of blue polished steel, highly nickel trimmed, and furnished with our patent regulating pipe damper, which controls the fire perfectly.

Trimmings — Porcelain enameled oven door panel, nickeled manifold and brackets, knob, key, wood oven door handle, mica gas burner vision.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Oven Construction
Comfort National Range

(See opposite page for description)

Comfort National

PLAIN SERIES

Cast Range

For Hard Coal, Soft Coal, Coke, Wood, Manufactured or Natural Gas

Detail

Number 818P	Holes Coal Four 8 inch	Holes Gas Four 8 inch	Size Oven 17x18x11½	Top Surface 26x42	SHIPPING WEIGHTS			
					With Balustrade Square	Balustrade Broiler	With High Square	High Closet Broiler
					465	485	515	535

Prices

(See net price list.)

Number 818P	Square and Balustrade \$	Code Word Clew	Broiler and Balustrade \$	Code Word Cliff	Square and High Closet \$	Code Word Client	Broiler and High Closet \$	Code Word Climate
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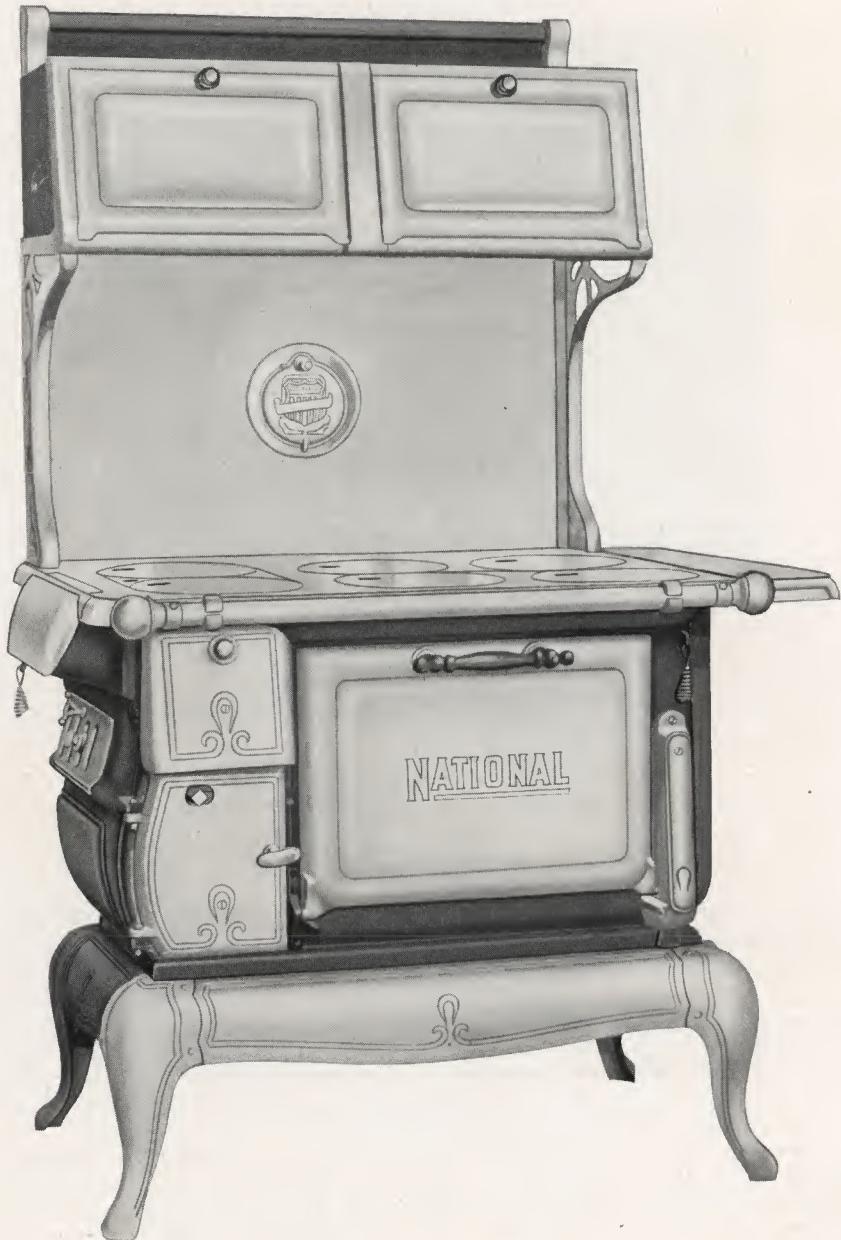
Cast Water "L" Front fitted in Range Fig. 29	Extra	\$	Code Word
Cast Water "L" Front Separate from Range, Fig. 29	Extra	\$	Wordy
2 Pipe Water Back Coil, Fig. 26	Extra	\$	Work
High Closet ordered separate from Range	Extra	\$	Wattle
If wanted with Polished Top	Extra	\$	Writhe
If wanted with 2 Nickel Legs and Nickel Front Base Strip	Extra	\$	Writer
If wanted with Nickel Oven door, fire door and ash door	Extra	\$	Writh
If wanted with Enamel Splasher Back on High closet	Extra	\$	Wrung
If wanted without Balustrade	Deduct	\$	Wry
			Wild

Water Heaters described on Page 11.
Balustrade described on Page 21.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range, Regular Iron Finish

For Hard Coal, Soft Coal or Wood

Newart National

S E R I E S E

Square with High Closet

Description, Pages 74-75

FOR GAS ATTACHMENT TO FIT THIS RANGE SEE PAGE 101

National Stoves, Ranges and Furnaces



Cast Range, Regular Iron Finish

For Hard Coal, Soft Coal or Wood

Newart National

S E R I E S E

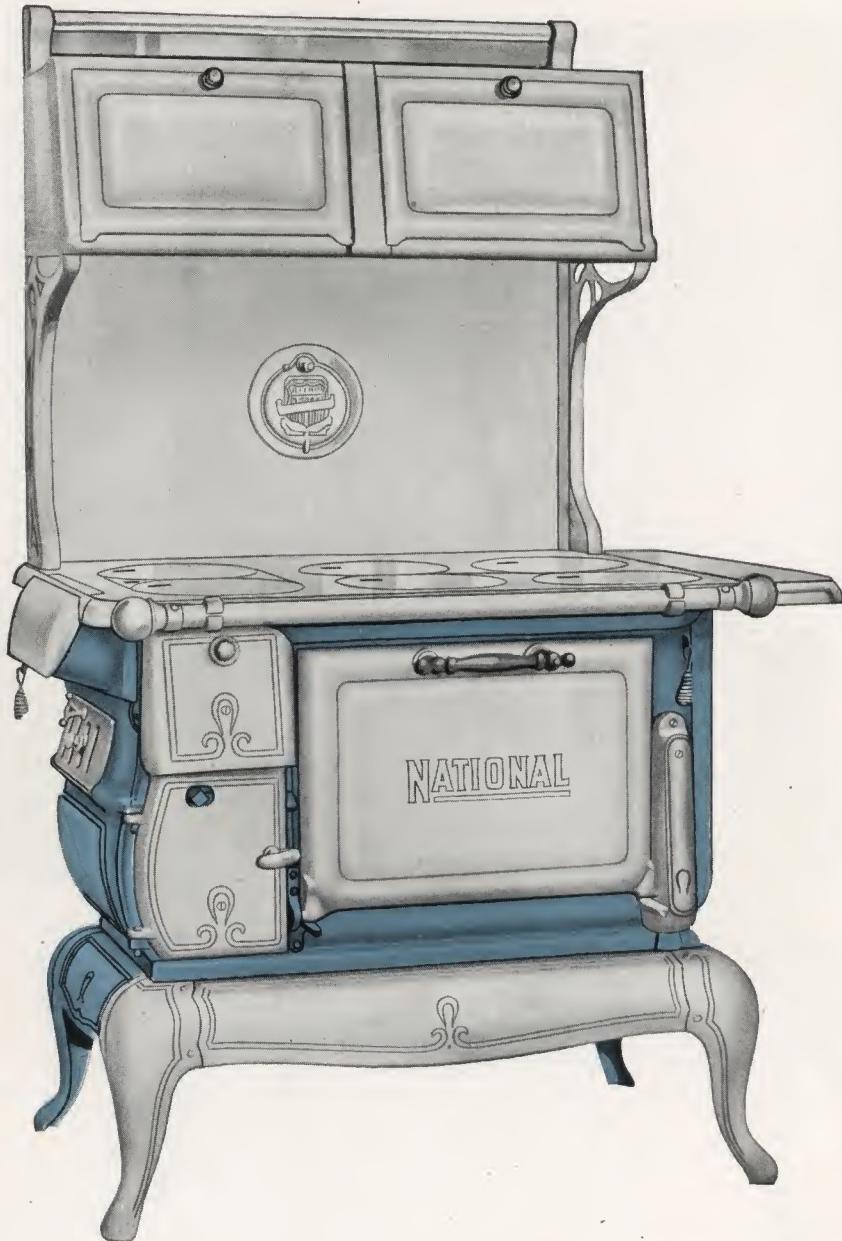
With Reservoir and High Closet

Description, Pages 74-75

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range, Blue Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Newart National

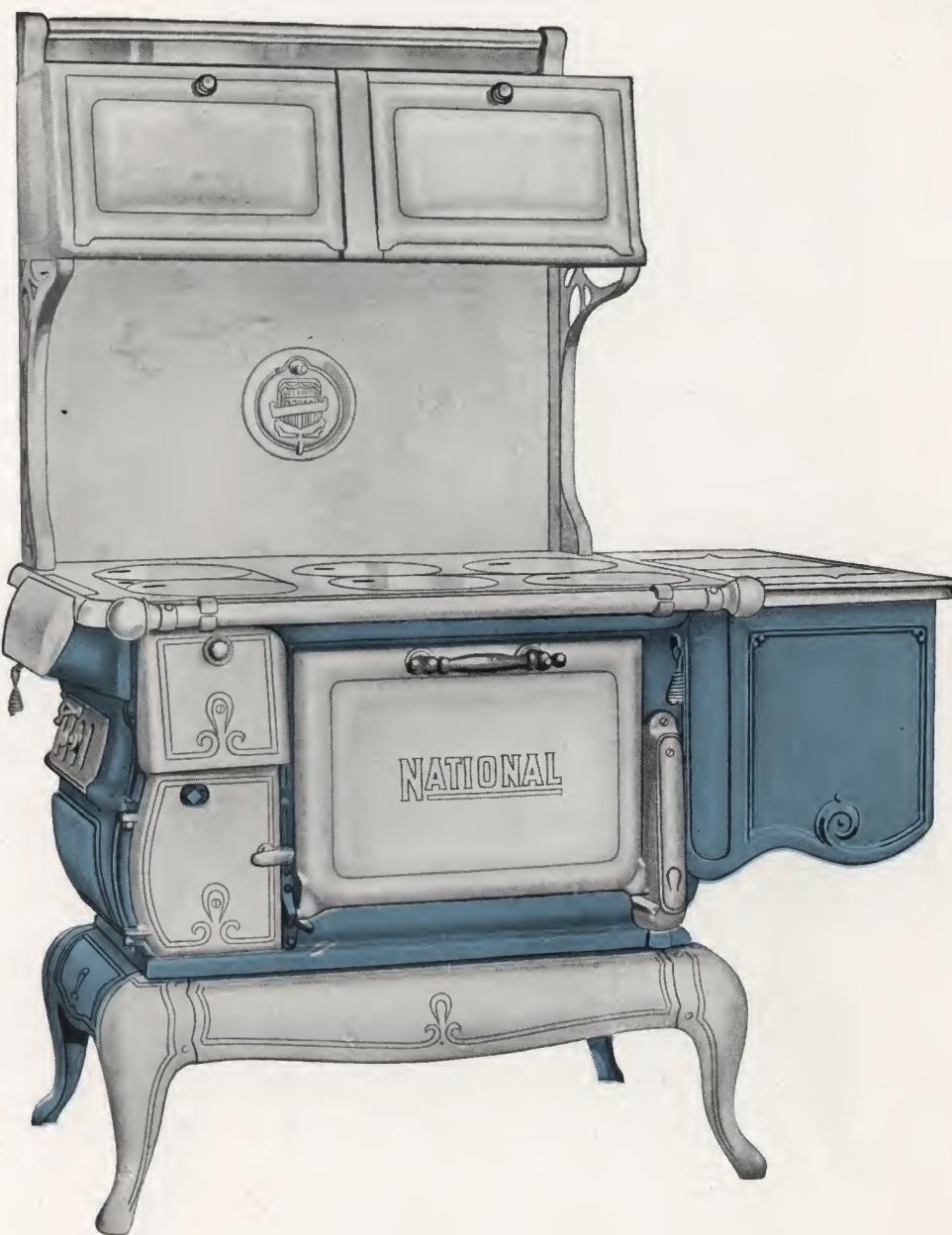
S E R I E S F

Square with High Closet

Description, Pages 74-75

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Range, Blue Porcelain Enamelled

For Hard Coal, Soft Coal or Wood

Newart National

S E R I E S F

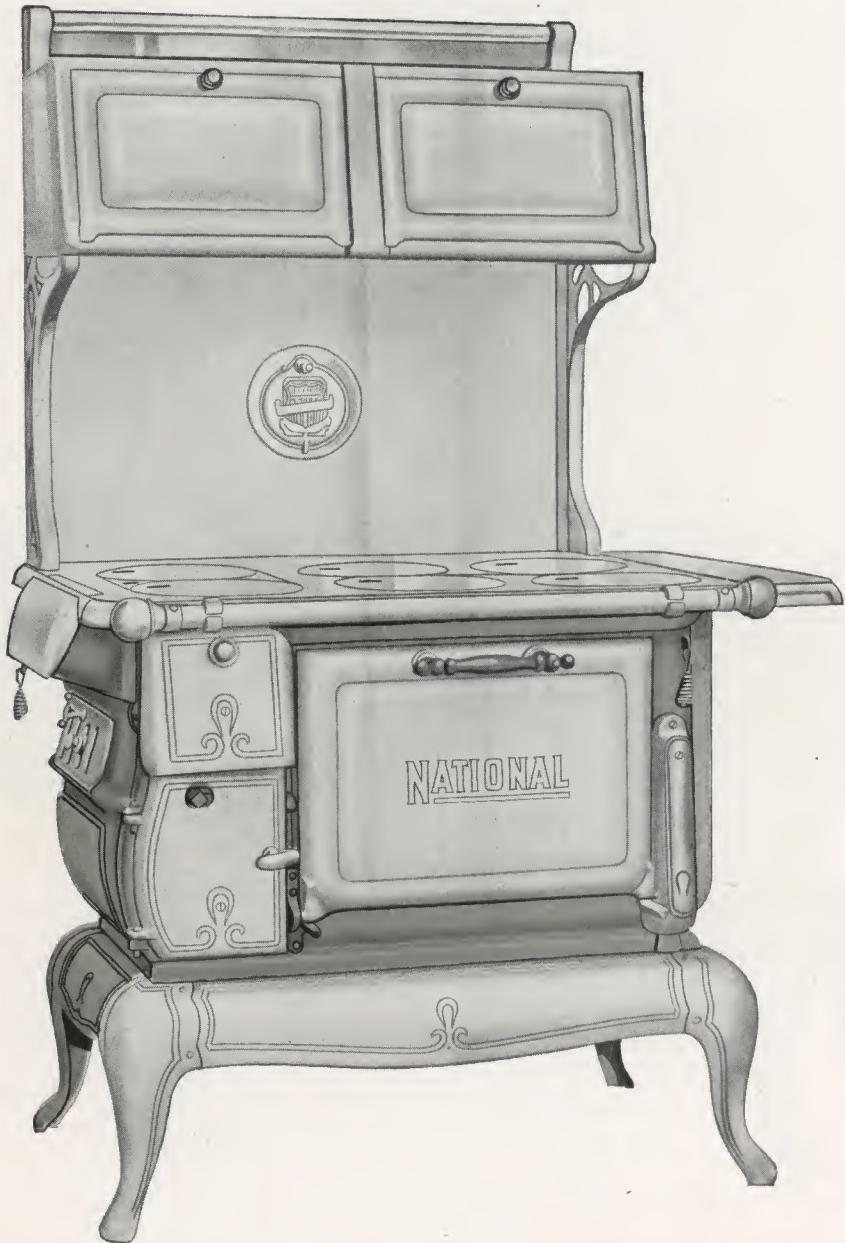
With Reservoir and High Closet

Description, pages 74-75

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Range, Gray Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Newart National

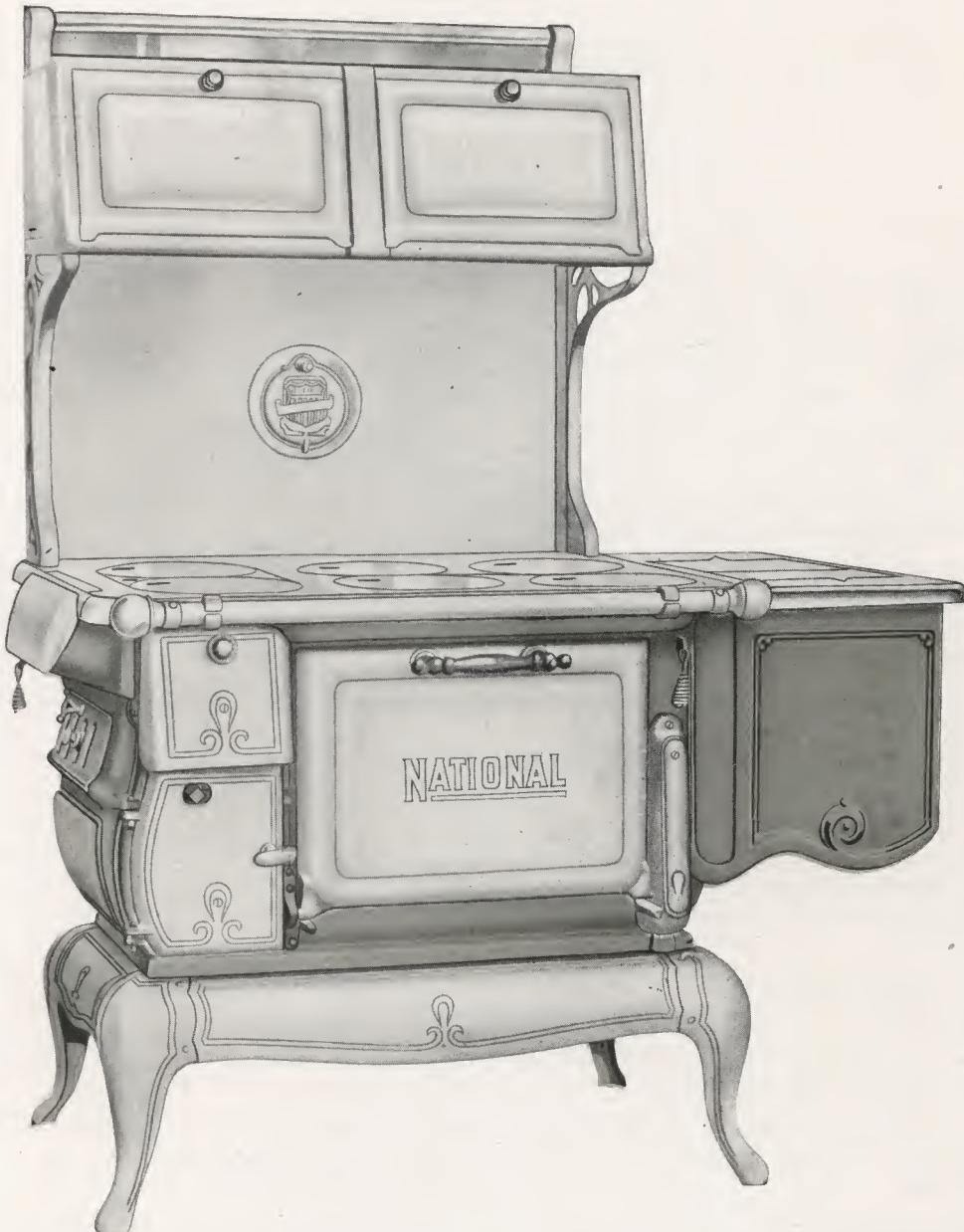
S E R I E S G

Square with High Closet

Description, Pages 74-75

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Range, Gray Porcelain Enameled

For Hard Coal, Soft Coal or Wood

Newart National

S E R I E S G

With Reservoir and High Closet

Description, Pages 74-75

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Newart National

Cast Range E, F and G Series

with Polished Top

For Hard Coal, Soft Coal or Wood

Construction — This is a high grade, plain design, all cast iron range.

The National system of mounting is used on these ranges consisting of lugs and bolts instead of rods. This system allows free expansion and contraction, thereby preventing the liability of cracking. Two flue system equalizes the heat to all parts of the oven. All flues are extra large, adaptable to the use of soft coal or wood.

The top is full width and provided with a loose cast elbow back of the high closet. This elbow is self-fastening and removable, so that it does not interfere with the range passing through an ordinary door opening. The top is cut into four sections and provided with heavy ribbed covers and centers, sheet steel ash pan, cast iron leg base. One simmering cover furnished with each range.

Oven — The entire inside of the oven is aluminized. Fitted with non-breakable wire oven rack. The top plate is convexed making it strong. All oven plates are provided with flanges on all edges to protect against fire cracking. Oven door is supported with a ventilated spring that carries the door open and shut, making it easy to operate. Wood oven door handle.

Fire Box — Oval fire box with heavy sectional cast iron linings, fitted with duplex grate for coal; same grate reversed makes a perfect wood grate.

The fire back is our National porcupine construction that insures quick baking and is guaranteed for twenty-five years.

Reservoir — This is made of copper tinned inside. It heats the water by contact to the back of range. Therefore this system of reservoir cannot interfere with the baking of the oven. The contact reservoir is made portable, and easily attached to square top range. A special fastening device allows the reservoir to be bolted to the body, and is sufficiently strong so that the range may be carried by the reservoir. Capacity: 8618 is 8 gallons; 8620, 9620 is 9 gallons.

Dampers — Pull-up damper operates through the front of range. It is made adjustable and can be removed without taking range apart. Check damper in smoke pipe operates through the splasher back.

Water Heater — Arranged for two pipe water back coil or a cast water "L" front. Our system heats most water and does not interfere with the baking.

Triple Plated Nickel Trimmings — Oven door, fire door, ash door, front draft door, spring pocket, towel bar, keys and knobs, two legs, one long base strip, high closet brackets, doors, door frames, balustrade corners, pipe damper and knobs.

Porcelain Enameled Parts — E Series—White Porcelain Enameled Oven Door Panel. Closet Door Panels and Splasher Back.

F Series—Blue Porcelain Enameled. G Series—Gray Porcelain Enameled.

Range front, left end, right end, two legs, one long base strip, two short base strips, name plate, reservoir front and back.

White Porcelain Enameled—F and G Series—Oven door panel, high closet door panels, main back and balustrade, top, ends and splasher back. The closet bottom is glazed enamel.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Newart National

Cast Range
For Hard Coal, Soft Coal or Wood
With Polished Top

Detail

Number	Holes	Ovens	*Top Surface		With Balustrade	SHIPPING WEIGHTS		
			Square	Reservoir		Square	Reservoir	With High Closet
8618	Six 8 inch	18x18x11½	25½x37	25½x42	330	390	405	465
8620	Six 8 inch	20x20x12	27½x40	27½x47	345	405	420	480
9620	Six 9 inch	20x20x12	27½x40	27½x47	348	408	423	483

Prices

(See net price list)

With Porcelain Enamelled Balustrade

Number	Style	Square	Code Word	Copper Reservoir	Code Word
8618E	Regular Iron Finish	\$.....	Cocoa	\$.....	Codist
8620E	Regular Iron Finish	.....	Cocoon	.....	Coerce
9620E	Regular Iron Finish	.....	Coction	.....	Coercion
8618F	Blue Enamelled	.....	Coddle	.....	Coercive
8620F	Blue Enamelled	.....	Codex	.....	Cogency
9620F	Blue Enamelled	.....	Codger	.....	Cogent
8618G	Gray Enamelled	.....	Codicil	.....	Cogitable
8620G	Gray Enamelled	.....	Codify	.....	Cogitate
9620G	Gray Enamelled	.....	Codifier	.....	Cogitative

With High Closet

Number	Style	Square	Code Word	Copper Reservoir	Code Word
8618E	Regular Iron Finish	\$.....	Cognate	\$.....	Cohereny
8620E	Regular Iron Finish	.....	Cognition	.....	Cohesion
9620E	Regular Iron Finish	.....	Cognizable	.....	Cohesive
8618F	Blue Enamelled	.....	Cognizant	.....	Cohort
8620F	Blue Enamelled	.....	Cognomen	.....	Coiffure
9620F	Blue Enamelled	.....	Cohabit	.....	Coinage
8618C	Gray Enamelled	.....	Coincide	.....	Coldly
8620C	Gray Enamelled	.....	Coiner	.....	Coldness
9620C	Gray Enamelled	.....	Cointense	.....	Colewort

Cast Water "L" Front fitted in Range, Fig. 29	Extra	\$	Code Word
Cast Water "L" Front separate from Range, Fig. 29	Extra	.....	Wordy
2-Pipe Water Back Coil, Fig. 26	Extra	.....	Work
Copper Reservoir for Style E, ordered separate from Range	Extra	.....	Wattle
Copper Reservoir for Style F or G, ordered separate from Range	Extra	.....	Weed
High Closet for Style E, ordered separate from Range	Extra	.....	Wimble
High Closet for Style F or G, ordered separate from Range	Extra	.....	Writh
If wanted without Balustrade	Deduct	.....	Windage
			Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas attachment on Style E, see Page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Polished Top—Cast Range

For Hard Coal, Soft Coal or Wood

Persian National

SQUARE WITH STEEL HIGH CLOSET

Description, Pages 78-79

FOR GAS ATTACHMENT TO FIT THIS RANGE, SEE PAGE 101

National Stoves, Ranges and Furnaces



Polished Top—Cast Range

For Hard Coal, Soft Coal or Wood

Persian National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 78-79

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Persian National

Cast Range

With Polished Top

For Hard Coal, Soft Coal or Wood

Construction — A range of high class construction, made of all cast iron, with all the advantages of steel ranges. The design is plain and handsome, easily cleaned and kept clean, with enough nickel trimmings to produce a rich and pleasing effect. These ranges contain all our exclusive National features that save fuel and make quick cookers and fine bakers. Mounted with bolts throughout, which allows free expansion and contraction of all parts, and prevents fire cracking of oven plates. Large sheet steel ash pan, cut long centers, heavy covers, substantial center rest, top cut in four sections, sheet flue system with extra large flues, end pouch feed suitable for either coal or wood, spring balanced oven door. One simmering cover furnished with each range.

We direct your special attention to the base-raising feature, a convenience when sweeping under the range.

Oven — Large, square, high and roomy. All oven plates are reinforced to prevent cracking. Oven rack is wire and non-breakable. Oven door is supported with ventilated spring that carries the door shut and open for ease in operation. Porcelain enameled oven door panel.

Fire Box — Extra heavy and reinforced cast iron linings with the National duplex grate for coal, same grate reversed for wood. This grate is adapted for either hard coal or soft coal. Porcupine fire back (guaranteed twenty-five years).

Damper — Plunger damper for direct draft operates on outside of the body and can never warp. This is the only damper required, whether used with or without reservoir.

Reservoir — Made of all copper, tinned inside. Heats by contact, i. e., the entire front of the reservoir lays close against the back of the range and absorbs the heat continually. There is no opening into the range back and requires no reservoir damper, therefore this system can not interfere with perfect baking. Has cast ends, cast top and japanned cover. The back of boiler is covered with an extra sheet of blue steel. Can be attached to square top range by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently and is sufficiently strong so that the range may be carried by the reservoir. Reservoir capacity: 8618-9618 is 10 gallons; 8620-9620 is 11 gallons.

Water Heater — Arranged for two-pipe water front coil, two-pipe water back coil, cast water "L" front. Our system heats most water and does not interfere with baking.

High Closet — Made of blue polished steel, highly nickel trimmed, with porcelain enameled door and splasher furnished with our patent regulating pipe damper, which controls the fire perfectly.

Triple Plated Nickel Trimmings — Oven door and handle, name plate, fire door and ash door, hinge pocket, reservoir panel, legs and three base strips, towel bar, shaker, cover lifter, closet ends, balustrade ends and match box on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Persian National

Cast Range

For Hard Coal, Soft Coal or Wood

With Polished Top.

Detail

Number	Holes	Ovens	*Top Surface		With Square	Balustrade Reservoir	SHIPPING WEIGHTS		With High Closet Reservoir
			Square	Reservoir			With Square	High	
8618	Six 8-inch	18x19x11 3/4	29x37	29x44	367	438	427	498	
9618	Four 9, Two 6	18x19x11 3/4	29x37	29x44	370	441	430	500	
8620	Six 8.inch	20x21x12 1/2	31x39	31x46	407	481	467	540	
9620	Four 9, Two 8	20x21x12 1/2	31x39	31x46	410	484	470	543	

Prices

(See net price list)

With Porcelain Enameled Balustrade

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Cives	\$.....	Claim
9618	Civic	.....	Clammy
8620	Civility	.....	Clamor
9620	Civilize	.....	Clamp

With High Closet

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Clannish	\$.....	Clarion
9618	Clanship	.....	Clashing
8620	Clap	.....	Clasper
9620	Claret	.....	Classify

Cast Water "L" Front fitted in Range, Fig. 29.....	extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29	extra	.....	Wordy
Water Front Coil fitted in Range, Fig. 23.....	extra	.....	Work
Water Front Coil separate from Range, Fig. 23.....	extra	.....	Wily
2-Pipe Water Back Coil, Fig. 26.....	extra	.....	Wince
Copper Reservoir ordered separate from Range.....	extra	.....	Wattle
High Closet ordered separate from Range.....	extra	.....	Weed
If wanted with Plain Legs and Base instead of Nickel.....	deduct	.....	Writh
If wanted with Plain Top instead of Polished.....	deduct	.....	Wrath
If wanted without Balustrade.....	deduct	.....	Wreck
			Wild

*Top surface measurements include Back top shelf on Square Ranges.

Water Heater described on Page 11.

Balustrade described on Page 21.

For Gas attachment see page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal or Wood

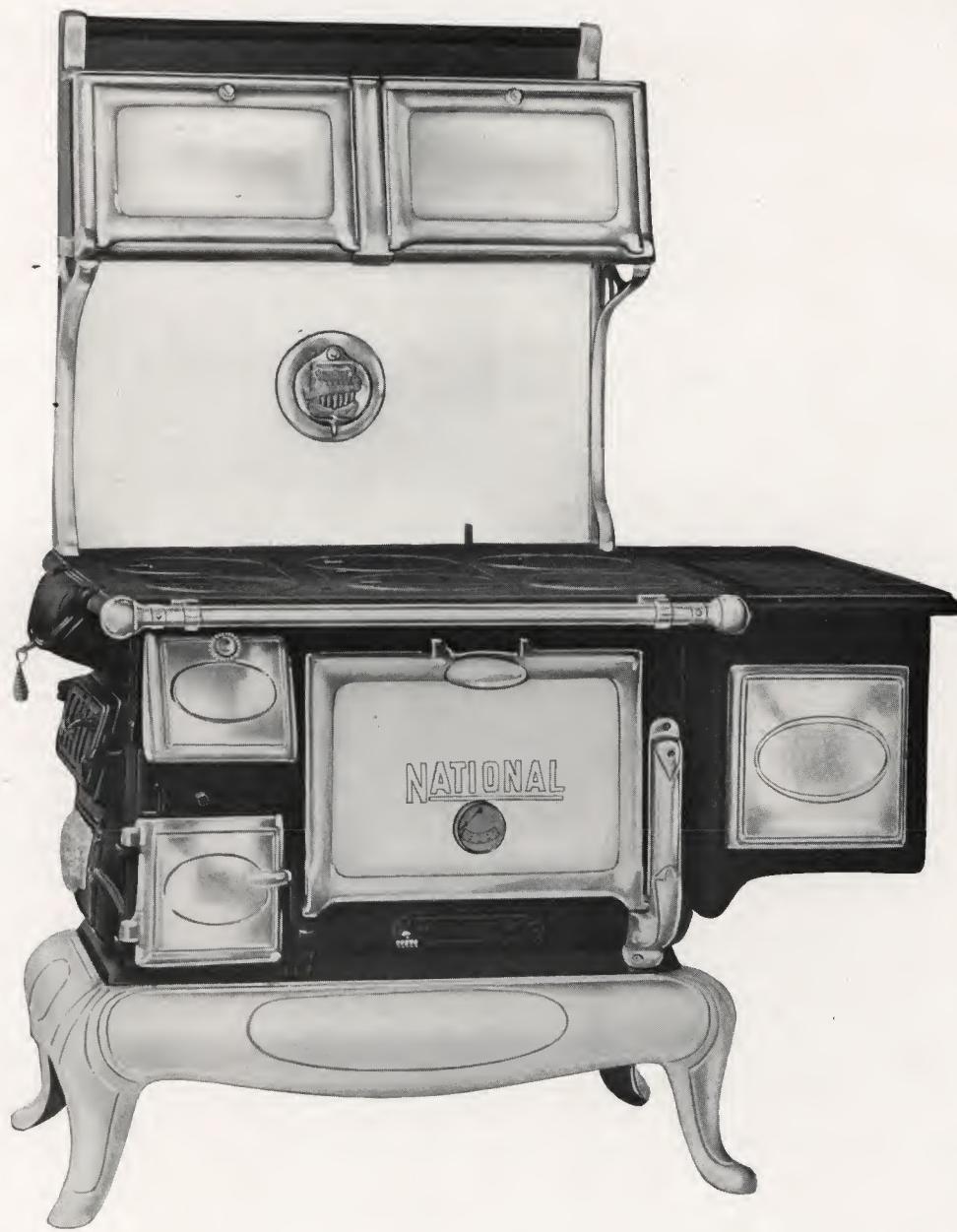
Gibson National

SQUARE WITH STEEL HIGH CLOSET

Description, Pages 82-83

FOR GAS ATTACHMENT TO FIT THIS RANGE, SEE PAGE 101

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal or Wood

Gibson National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 82-83

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Gibson National

Cast Range

For Hard Coal, Soft Coal or Wood

Construction — A range of high class construction, made of all cast iron, with all advantages of steel ranges. The design is plain and handsome, easily cleaned and kept clean. Elaborately nickel trimmed. These ranges contain all our exclusive National features that save fuel and make quick cookers and fine bakers. The top is full width and provided with detachable cast elbow back of the high closet, this elbow is fastened with turn latch and removable, so that it does not interfere with the range passing through an ordinary door opening. Mounted with bolts throughout, which allows free expansion and contraction of all parts, and prevents fire cracking oven plates. Large sheet steel ash pan, cut long centers, heavy covers, substantial center rest, top cut in four sections, sheet flue system with extra large flues, end pouch feed suitable for either coal or wood, spring balanced oven door. One simmering cover furnished with each range.

We direct your special attention to the base-raising feature, a convenience when sweeping under the range.

Oven — Large, square, high and roomy, with all oven plates reinforced to prevent cracking. Oven rack is wire and non-breakable. Oven doors lined with sheet steel. Porcelain enameled oven door panel.

Fire Box — Extra heavy and reinforced cast iron linings with the National duplex grate for coal, same grate reversed for wood. This grate is adapted for either hard coal or soft coal. Porcupine fire back (guaranteed twenty-five years).

Dampers — Plunger damper for direct draft operates on outside of the body and can never warp. This is the only damper required, whether used with or without reservoir. Check damper in smoke pipe operates through the splasher back.

Reservoir — Made of all copper, tinned inside. Heats by contact, i.e., the entire front of the reservoir lies close against the back of the range and absorbs the heat continually. There is no opening into the range back and requires no reservoir damper, therefore this system cannot interfere with perfect baking. Has cast ends, cast top and japanned cover. The back of boiler is covered with an extra sheet of blue steel. Can be attached to square top range by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong so that the range may be carried by the reservoir.

Reservoir capacity; 8618 is 10 gallons; 8620-9620 is 11 gallons.

Thermometer — Furnished with all sizes. Measures heat just as a clock measures time. It avoids bad luck when baking.

Water Heater — Arranged for two-pipe water front coil, two-pipe water back coil or cast water "L" front. Our system heats most water and does not interfere with baking.

High Closet — Made of blue polished steel with porcelain Enamelled Splasher Back and door panels. Nickeled closet front, door frames, brackets, pipe damper and Balustrade Corners.

Triple Plated Nickel Trimmings — Legs and 3 base strips, oven door and handle, fire door, ash door, panel on reservoir, towel bar, name plate, shaker and cover lifter.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Gibson National

Cast Range For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	*Top Surface	With Balustrade	SHIPPING WEIGHTS		
			Square		Reservoir	Reservoir	High Closet Reservoir
8618	Six 8-inch	18x19x11 3/4	29x37	29x44	371	442	431 503
8620	Six 8-inch	20x21x12 1/2	31x39	31x46	413	487	473 533
9620	Four 9, Two 8	20x21x12 1/2	31x39	31x46	416	490	476 536

Prices

(See net price list)

With Porcelain Enamelled Balustrade

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Chyle	\$.....	Cimmerian
8620	Cleatrise	.....	Cincture
9620	Cillary	.....	Cinerary

With High Closet

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Cinnamon	\$.....	Circlet
8620	Cypher	.....	Circular
9620	Cirean	.....	Circulate

Cast Water "L" Front fitted in Range, Fig. 29	extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29	extra	.....	Wordy
Water Front Coil fitted in Range, Fig. 23	extra	.....	Work
Water Front Coil separate from Range, Fig. 23	extra	.....	Wily
2-Pipe Water Back Coil, Fig. 26	extra	.....	Wince
Copper Reservoir ordered separate from Range	extra	.....	Wattle
High closet ordered separate from Range	extra	.....	Weed
If wanted with Polished Top	extra	.....	Writhe
If wanted without Balustrade	deduct	.....	Writer
			Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas Attachment, See Page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal or Wood

Gothic National

S Q U A R E W I T H S T E E L H I G H C L O S E T

Description, Pages 86-87

F O R G A S A T T A C H M E N T T O F I T T H I S R A N G E S E E P A G E 101

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal or Wood

Gothic National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 86-87

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Gothic National

Cast Range

For Hard Coal, Soft Coal or Wood

Construction — A range of high class construction, made of all cast iron, with all advantages of steel ranges. The design is plain and handsome, easily cleaned and kept clean. These ranges contain all our exclusive National features that save fuel and make quick cookers and fine bakers. The top is full width and provided with Detachable cast elbow back of high closet. This elbow is fastened with turn latch and removable so that it does not interfere with the range passing through an ordinary door opening. Mounted with bolts throughout, which allows free expansion and contraction of all parts, and prevents fire cracking of the oven plates. Large sheet steel ash pan, cut long centers, heavy covers, substantial center rest, top cut in four sections, sheet flue system with extra large flues, end pouch feed suitable for either coal or wood, spring balanced oven door. One simmering cover furnished with each range.

We direct your special attention to the base-raising feature, a convenience when sweeping under the range

Oven — Large, square, high and roomy, with all oven plates reinforced to prevent cracking. Oven rack is wire and non-breakable. Oven doors lined with sheet steel. Porcelain enameled oven door panel.

Fire Box — Extra heavy and reinforced cast iron linings with the National duplex grate for coal, same grate reversed for wood. This grate is adapted for either hard coal or soft coal. Porcupine fire back (guaranteed twenty-five years).

Dampers — Plunger damper for direct draft operates on outside of the body and can never warp. This is the only damper required, whether used with or without reservoir. Cheek damper in smoke pipe operates through the splasher back.

Reservoir — Made of all copper, tinned inside. Heats by contact, i.e., the entire front of the reservoir lies close against the back of the range and absorbs the heat continually. There is no opening into the range back and requires no reservoir damper, therefore this system cannot interfere with perfect baking. Has cast ends, cast top and japanned cover. The back of boiler is covered with an extra sheet of blue steel. Can be attached to square top range by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong so that the range may be carried by the reservoir.

Reservoir capacity; 8618 is 10 gallons; 8620-9620 is 11 gallons.

Water Heater — Arranged for two-pipe water front coil, cast Water "L" Front or two-pipe water back coil. Our system heats most water and does not interfere with baking.

High Closet — Made of blue polished steel with porcelain enameled splasher back and door panels. The pipe damper controls the fire perfectly.

Triple Plated Nickel Trimmings — Oven door and handle, towel bar, name plate, spring pocket, grate shaker, cover lifter, keys and knobs. Closet front, door frames, brackets, pipe damper; balustrade corners and knobs on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Gothic National

Cast Range For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	*Top Surface		SHIPPING WEIGHTS			
			Square	Reservoir	With Balustrade	Reservoir	With Square	High Closet Reservoir
8618	Six 8 inch	18x19x11 $\frac{3}{4}$	29x37	29x44	371	442	431	503
8620	Six 8 inch	20x21x12 $\frac{1}{2}$	31x39	31x46	413	487	473	533
9620	Four 9, Two 8	20x21x12 $\frac{1}{2}$	31x39	31x46	416	490	476	536

Prices

(See net price list)

With Porcelain Enameled Balustrade

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Colicy	\$.....	Collation
8620	Collapse	.....	Collected
9620	Collator	.....	Collective

With High Closet

Number	Square	Code Word	Copper Reservoir	Code Word
8618	\$.....	Collegian	\$.....	Colligate
8620	Collide	.....	Collocate
9620	Collier	.....	Colloid

Cast Water "L" Front fitted, in Range, Fig. 29	Extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29	Extra	.....	Wordy
Water Front Coil fitted in Range, Fig. 23	Extra	.....	Work
Water Front Coil separate from Range, Fig. 23	Extra	.....	Wily
2 Pipe Water Back Coil, Fig. 26	Extra	.....	Wince
Copper Reservoir ordered separate from Range	Extra	.....	Wattle
High Closet ordered separate from Range	Extra	.....	Weed
If wanted with Polished Top	Extra	.....	Writh
If wanted without Balustrade	Deduct	.....	Writer
			Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas Attachment see page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal or Wood

Newport National

SQUARE WITH STEEL HIGH CLOSET

Description, Pages 90-91

FOR GAS ATTACHMENT TO FIT THIS RANGE SEE PAGE 101

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal or Wood

Newport National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 90-91

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Newport National

Cast Range

For Hard Coal, Soft Coal or Wood

Construction — This is a high grade, plain design, all cast iron range. The National system of mounting is used on these ranges consisting of lugs and bolts instead of rods, this system allows free expansion and contraction, thereby preventing the liability of cracking. Flue system same as our Nubian National (see illustration Page 98). All flues are extra large, adaptable to the use of soft coal or wood.

The top is full width and provided with a detachable cast elbow back of the high closet, this elbow is self-fastening and removable, so that it does not interfere with the range passing through an ordinary door opening.

The top is cut into four sections and provided with heavy ribbed covers and centers, sheet steel ash pan, stee leg base. One simmering cover furnished with each range.

Oven — Square shaped oven. Fitted with non-breakable wire oven rack. The top plate is convexed making it strong. All oven plates are provided with flanges on all edges to protect against fire cracking. Oven door is supported with a ventilated spring that carries the door open and shut, making it easy to operate. Wood oven door handle.

Fire Box — Oval fire box with heavy sectional cast iron linings, fitted with duplex grate for coal; same grate reversed makes a perfect wood grate.

The fire back is our National porcupine construction that insures quick baking and is guaranteed for twenty-five years.

Reservoir — This is made of Galvanized Iron or of Copper tinned inside. It heats the water by contact to the back of range; therefore this system of reservoir cannot interfere with the baking of the oven. The contact reservoir is made portable, easily attached to square top range. A special fastening device allows the reservoir to be bolted to the body, and is sufficiently strong so that the range may be carried by the reservoir. Capacity: 8618 is 8 gallons; 8620, 9620 is 9 gallons.

Dampers — Pull-up damper operates through the front of range, it is made adjustable and can be removed without taking range apart. Check damper in smoke pipe operates through the splasher back.

Water Heater — Arranged for two pipe water back coil or a cast water "L" front. Our system heats most water and does not interfere with the baking.

Triple Plated Nickel Trimmings — Oven door, towel bar, keys and knobs, high closet brackets, balustrade corners, pipe damper and knobs.

White Porcelain Enameling — Oven door panel, high closet door panels.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Newport National

Cast Range

For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	*Top Surface Square	Reservoir	SHIPPING WEIGHTS			
					With Balustrade Square	With Balustrade Reservoir	With High Square	With High Closet Reservoir
8618	Six 8 inch	18x18x11½	25½x37	25½x42	272	337	337	382
8620	Six 8 inch	20x20x12½	27½x40	27½x47	310	365	365	420
9620	Six 9 inch	20x20x12½	27½x40	27½x47	313	368	368	423

Prices

(See net price list)

With Porcelain Enameled Balustrade

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Collude	\$.....	Collusory	\$.....	Colony
8620	Collusion	.....	Colonist	.....	Colorable
9620	Collusive	.....	Colonize	.....	Colorific

With High Closet

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Coloring	\$.....	Colossus	\$.....	Comate
8620	Colorless	.....	Coulter	.....	Comatose
9620	Colossal	.....	Colures	.....	Combat

Cast Water "L" Front fitted in Range. Fig. 29.	Extra	\$.....	Code Word
Cast Water "L" Front separate from Range. Fig. 29.	Extra	.....	Wordy
2 Pipe Water Back Coil. Fig. 26.	Extra	.....	Work
Galvanized Reservoir ordered separate from Range.	Extra	.....	Wattle
Copper Reservoir ordered separate from Range.	Extra	.....	Web
No. 4 Gas Hot Plate fitted to Range.	Extra	.....	Weed
No. 4 Gas Hot Plate separate from Range.	Extra	.....	Worker
Cast Base strips instead of steel.	Extra	.....	Working
High Closet ordered separate from Range.	Extra	.....	Wrangle
If wanted with Polished Top.	Extra	.....	Writhe
If wanted without Balustrade.	Deduct	.....	Writer
		.....	Wild

*Top surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas attachment, see page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal or Wood

Notable National

SQUARE WITH STEEL HIGH CLOSET

Description, Pages 94-95

FOR GAS ATTACHMENT TO FIT THIS RANGE, SEE PAGE 101

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal or Wood

Notable National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 94-95

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Notable National

Cast Range

For Hard Coal, Soft Coal or Wood

Construction — A first class cast iron range, modeled in colonial design, which is clean and easily kept clean. It is mounted without rods. The national system of mounting is used in these ranges, consisting of lugs and bolts, which allows free expansion and contraction of all parts of the range and thoroughly prevents fire cracking of all castings. The top is full width and provided with a loose cast elbow back of the high closet; this elbow is self-fastening and removable, so that it does not interfere with the range passing through an ordinary door opening. Two flue system equalizes the heat to all parts of the oven. All flues are extra large, adaptable to the use of soft coal or wood. Top cut into four sections, heavy ribbed covers and centers, sheet steel ash pan. Mounted on cast iron base. One simmering cover furnished with each range.

Oven — Large square shaped oven. Fitted with non-breakable wire oven rack. The top oven plate is convexed, making it extra strong. All oven plates are provided with flanges on all edges to protect against fire cracking. Oven door is supported with ventilated spring that carries the door shut and open for ease in operation. Wood oven door handle. Porcelain enameled oven door panel.

Fire Box — Oval fire box with heavy sectional cast iron linings fitted with duplex grate for coal; same grate reversed makes a perfect wood grate. The fire back is our National porcupine construction that makes quick baking qualities and is guaranteed for twenty-five years.

Reservoir — Is made of galvanized iron, or copper as desired. It heats the water by contact to the back of range. There is no extra damper required to heat the water nor does it connect to any opening in the range; therefore this system of reservoir can not possibly interfere with the baking of the oven. Reservoir covers are japanned and ornamented. The contact reservoir is made portable, easily attached to a square range. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong that the range may be carried by the reservoir. Reservoir capacity 8618 is 8 gallons; 8620-9620 is 9 gallons.

Thermometer — Furnished with all sizes. Measures heat just as a clock measures time. It avoids bad luck when baking.

Dampers — Pull-up damper operates through front of range; the damper rod and blade is made adjustable to remove without taking range apart. Slide damper in front door.

Water Heater — Arranged for two-pipe water back coil and cast water "L" front, our system heats most water and does not interfere with the baking.

High Closet — Made of blue polished steel, nickel trimmed with porcelain enameled door panels and furnished with a check damper, which operates through the splasher back.

Triple Plated Nickel Trimmings — Oven door, towel bar, cover lifter and shaker, keys and knob, brackets, pipe damper, and door knobs, also balustrade corners on high closet.

THE FLUE SYSTEM OF THIS RANGE IS THE SAME AS OUR
NUBIAN, PAGE 98

National Stoves, Ranges and Furnaces



Notable National

Cast Range

For Hard Coal, Soft Coal or Wood

Detail

Number	Holes	Ovens	*Top Surface		With Square	SHIPPING WEIGHTS			
			Square	Reservoir		Balustrade Reservoir	With Square	High Reservoir	Closet Reservoir
8618	Six 8 inch.	18x18x11½	25½x37	25½x42	290	345	345	400	
8620	Six 8 inch.	20x20x12	27½x40	27½x47	328	383	383	428	
9620	Six 9 inch.	20x20x12	27½x40	27½x47	331	386	386	441	

Prices

(See net price list)

With Porcelain Enamelled Balustrade

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Climb	\$.....	Clinic	\$.....	Clod
8620	Clinch	.....	Cliave	.....	Cloggy
9620	Cling	.....	Cloak	.....	Closely

With High Closet

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Closing	\$.....	Cloud	\$.....	Clown
8620	Closure	.....	Clough	.....	Cloy
9620	Clothe	.....	Clove	.....	Cluck

Cast Water "L" Front fitted in Range, Fig. 29	Extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29	Extra	.....	Wordy
2 Pipe Water Back Coil, Fig. 26	Extra	.....	Work
Galvanized Reservoir ordered separate from Range	Extra	.....	Wattle
Copper Reservoir ordered separate from Range	Extra	.....	Web
No. 4 Gas Hot Plate fitted to Range	Extra	.....	Weed
No. 4 Gas Hot Plate separate from Range	Extra	.....	Worker
2 Nicke' Legs and Nickel Front Base Strip	Extra	.....	Working
High Closet ordered separate from Range	Extra	.....	Wroth
If wanted with Polished Top	Extra	.....	Writh
White Enamel Splasher Plate on High Closet	Extra	.....	Writer
Nickel Fire Door and Ash Door	Extra	.....	Worry
If wanted without Balustrade	Deduct	.....	Wrung
		.....	Wild

*Top Surface measurements include Back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas Attachment see page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Range

For Hard Coal, Soft Coal or Wood

Nubian National

SQUARE WITH STEEL HIGH CLOSET

Description, Pages 98-99

FOR GAS ATTACHMENT TO FIT THIS RANGE, SEE PAGE 101

National Stoves, Ranges and Furnaces



Cast Range

For Hard Coal, Soft Coal or Wood

Nubian National

WITH RESERVOIR AND STEEL HIGH CLOSET

Description, Pages 98-99

THE FIRE BACK IN THIS RANGE LASTS FOREVER



Excelsior Stove & Manufacturing Company

Nubian National

Cast Range

For Hard Coal, Soft Coal or Wood



Sectional View
Showing Heat Travel Under Covers



Sectional View
Showing Heat Travel Under Oven

Construction — A first class cast iron range, modeled in colonial design, which is clean and easily kept clean. It is mounted without rods. The National system of mounting is used in these ranges, consisting of lugs and bolts, which allows free expansion and contraction of all parts of the range and thoroughly prevents fire cracking of all castings. Two flue system equalizes the heat to all parts of the oven. All flues are extra large, adaptable to the use of soft coal or wood. Top cut into four sections, heavy ribbed covers and centers, sheet steel ash pan. Mounted on never-break steel base. One simmering cover furnished with each range.

Oven — Large square shaped oven fitted with non-breakable wire oven rack. The top oven plate is convexed, making it extra strong. All oven plates are provided with flanges on all edges to protect against fire cracking. Oven door is supported with ventilated spring that carries the door shut and open for ease in operation. Porcelain oven door panel and wood handle.

Fire Box — Oval fire box with heavy sectional cast iron linings fitted with duplex grate for coal; same grate reversed makes a perfect wood grate. The fire back is our National porcupine construction that insures quick baking and is guaranteed for twenty-five years.

Reservoir — Is made of galvanized iron, or copper as desired. It heats the water by contact to the back of range. There is no extra damper required to heat the water nor does it connect to any opening in the range; therefore this system of reservoir can not possibly interfere with the baking of the oven. Reservoir covers are japanned and ornamented. The contact reservoir is made portable, easily attached to a square range. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong that the range may be carried by the reservoir. Reservoir capacity 8618 is 8 gallons; 8620-9620 is 9 gallons.

Dampers — Pull-up damper operates through front of range; the damper rod and blade is made adjustable to remove without taking range apart. Slide damper in front door.

Water Heater — Arranged for two-pipe water back coil and cast water "L" front, our system heats most water and does not interfere with the baking.

High Closet — Made of blue polished steel, highly nickel-trimmed, and furnished with our patent regulating pipe damper, which controls the fire perfectly.

Triple Plated Nickel Trimmings — Towel bar, cover lifter and shaker, and all edges, brackets, jambs, teapot shelves, pipe damper, closet panel and handle, also balustrade corners on high closet.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Nubian National

Cast Range

For Hard Coal, Soft Coal or Wood

Number	Holes	Ovens	Square	*Top Surface Reservoir	SHIPPING WEIGHTS			
					With Balustrade Square	Reservoir	With High Closet Square	Reservoir
8618	Six 8 inch	18x18x11½	25½x37	25½x42	280	335	335	390
8620	Six 8 inch	20x20x12	27½x40	27½x47	318	373	373	428
9620	Six 9 inch	20x20x12	27½x40	27½x47	321	376	376	431

Prices

(See net price list)

With Porcelain Enameled Balustrade

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Clatter	\$.....	Claviary	\$.....	Claw
8620	Clause	.....	Clavice	.....	Clean
9620	Clavated	.....	Clavier	.....	Clearer

With High Closet

Number	Square	Code Word	Galvanized Reservoir	Code Word	Copper Reservoir	Code Word
8618	\$.....	Clearing	\$.....	Cleavable	\$.....	Clematis
8620	Clerly	.....	Cleavage	.....	Clemency
9620	Clearness	.....	Cleaver	.....	Clever

Cast Water "L" Front fitted in Range, Fig. 29	.....	Extra	\$.....	Code Word
Cast Water "L" Front separate from Range, Fig. 29.	.....	Extra	.....	Wordy
2 Pipe Water Back Coil, Fig. 26	.....	Extra	.....	Work
Galvanized Reservoir ordered separate from Range	.....	Extra	.....	Wattle
Copper Reservoir ordered separate from Range	.....	Extra	.....	Web
No. 4 Gas Hot Plate fitted to Range	.....	Extra	.....	Weed
No. 4 Gas Hot Plate separate from Range	.....	Extra	.....	Worker
Cast Base Strips instead of Steel	.....	Extra	.....	Working
High Closet ordered separate from Range	.....	Extra	.....	Wrangle
If wanted with Polished Top	.....	Extra	.....	Writhe
White Enamel Splasher Plate on High Closet	.....	Extra	.....	Writer
Nickel Oven Door, Fire Door and Ash Door	.....	Extra	.....	Worry
If wanted without Balustrade	.....	Deduct	.....	Wrung
				Wild

*Top Surface measurements include back top shelf on Square Ranges.

Water Heaters described on Page 11.

Balustrade described on Page 21.

For Gas attachment see Page 101.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Blue Steel

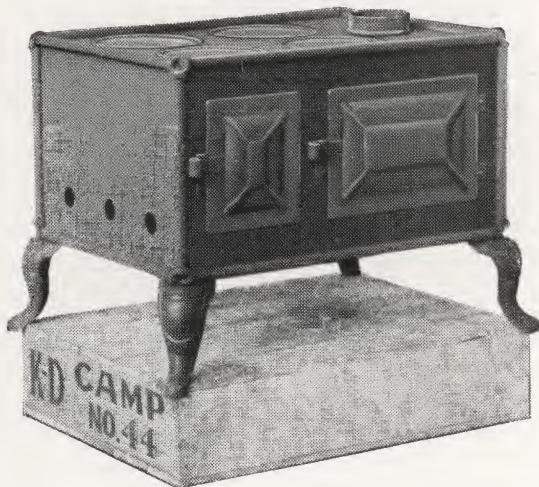
For Wood Only

S. U. Camp Stoves

Number	Holes	Ovens	Top	Height	Weight	Price	Code Word
2	2	10x10	12x23	12	20	\$....	Latent
4	4	10x15½	16x23	12	25	....	Lateral

Price includes 6-foot telescope pipe.

SHIPPED SET UP AND CRATED ONE IN A CRATE



Blue Steel

For Wood Only

K. D. Camp Stove

Number	Holes	Ovens	Top	Height Body	Weight	Price	Code Word
22	2	10x10	12x23	12	27	\$....	Lava
44	4	10x15½	16x23	12	32	....	Laver

Price includes 6-foot telescope pipe.

The illustration shows our Knock Down Camp Stove mounted upon the box in which it is packed for shipment. Sliding damper over the oven makes it a perfect baker. Cast corners and cast legs, easily set up, saves space and freight. Edges are made of slotted steel tubing and slide over special folded ends, making strictly airtight and ash-proof joints.

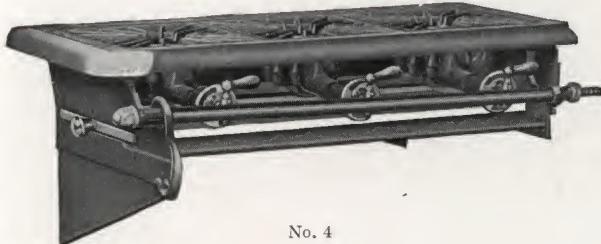
NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



National Gas Hot Plate

For Manufactured or Natural Gas



No. 4

Number		Price	Code Word
4	Fitted to Range	\$.....	Worker
4	Separate from Range	.....	Working

Used on all sizes, Splendid, on 8618 size only Gibson, Gothic, Persian and 8618-8620 Nubian, Notable, Newport and Style E Newark Ranges.

When ordering state name of range and size for which it is intended.

These are made with three extra large star burners on top with loose spider sections. The entire line of burners may be removed for cleaning. Lever valves always indicate the amount of gas supplied. Galvanized scavenger pan removable through front. Size gas cooking top, 14x28½ inches.

National Gas Companion

For Manufactured or Natural Gas



No. 5

Number		Price	Code Word
5	Fitted to Range	\$.....	Workman
5	Separate from Range	.....	Workshop

Used on all sizes Splendid Ranges.

When ordering state Number of Range for which it is intended.

Our Gas Companion consists of an attachable gas cooker and baker. It has three large star burners on top with loose spider sections. The entire line of burners may be removed for cleaning. Lever valves always indicate the amount of gas supplied. Galvanized oven top and scavenger pan removable through front. Size gas cooking top, 14x28½ inches. The oven is provided with a double burner and pilot lighter, visible through mica front. The oven bottom is double and removable, permitting free access to the burners for cleaning. Wire oven rack adjustable to any height in the oven space; oven door thermometer. The entire oven is made of steel, thoroughly asbestos lined, with cast burner top and oven front. Size gas oven, 14 inches wide, 18 inches deep, 11½ inches high.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

NATIONAL Cooking Stoves are now in use in millions of American Homes—they have proven their worth in actual service.

The wonderful Porcupine fire back guaranteed for twenty-five years gives the dealer a selling feature that means to the user, less fuel, quicker service, greater durability and satisfaction.



NATIONAL
COOKING
STOVES

Grandpa, this is
my wonderful
National Stove
It cooks and
bakes quickly
with little fuel.



Excelsior Stove & Manufacturing Company

Roman National

Cast Cook

For Hard Coal, Soft Coal or Wood

Construction — A stove of high-class construction, made of all cast iron. The design is plain and handsome, easily cleaned and kept clean, with enough nickel trimmings to produce a rich and pleasing effect. These stoves contain all our exclusive National features that save fuel and make quick cookers and fine bakers. Mounted with bolts throughout, which allows free expansion and contraction of all parts, and prevents fire cracking of oven plates. Large sheet steel ash pan, draw-out and drop hearth slide, cut long centers, heavy covers, substantial center rest, top cut in four sections, two-flue system with extra large flues. One simmering cover furnished with each stove.

We direct your special attention to the base-raising feature, a convenience when sweeping under the stove.

Oven — Large, square, high and roomy, with all oven plates reinforced to prevent cracking. Oven rack is wire and non-breakable. Oven doors aluminum lined.

Fire Box — Extra heavy and reinforced cast iron linings with the National duplex grate for coal, same grate reversed for wood. This grate is adapted for either hard coal or soft coal. Porcupine fire back (guaranteed twenty-five years).

Damper — Rolling damper for direct draft. This is the only damper required, whether used with or without reservoir.

Reservoir — Made of all copper, tinned inside. Heats by contact, i. e., the entire front of the reservoir lays close against the back of the stove and absorbs the heat continually. There is no opening into the stove back and requires no reservoir damper, therefore this system can not interfere with perfect baking. Has cast ends, cast top and japanned cover. The back of boiler is covered with an extra sheet of blue steel. Can be attached to square top stove by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently and is sufficiently strong so that the stove may be carried by the reservoir. Reservoir capacity: 818 is 10 gallons; 820-920 is 11 gallons.

Thermometer — Furnished with all sizes. Measures heat just as a clock measures time. It avoids bad luck when baking.

Water Heater — Arranged for two-pipe water front coil.

Triple Plated Nickel Trimmings — Oven door panel and handles, front door panel and handle, fire door panel, hearth edge, oven shelf edge, front top edge, ash guard, kicker, towel rod, shaker and cover lifter.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Apollo National

Cast Cook

For Wood Only

Construction — A stove of high-class construction, made of all cast iron. The design is plain and handsome, easily cleaned and kept clean, with enough nickel trimmings to produce a rich and pleasing effect. These stoves contain all our exclusive National features that save fuel and make quick cookers and fine bakers. Mounted with bolts throughout, which allows free expansion and contraction of all parts, and prevent fire cracking of oven plates. Large sheet steel ash pan, draw-out and drop hearth slide, cut long centers, heavy covers, substantial center rest top cut in four sections, two-flue system with extra large flues. One simmering cover furnished with each stove.

We direct your special attention to the base-raising feature, a convenience when sweeping under the stove.

Oven — Large, square, high and roomy, with all oven plates reinforced to prevent cracking. Oven rack is wire and non-breakable. Oven doors aluminine lined.

Fire Box — Is extra large, accommodating large size wood. Swinging fender, a convenience in removing ashes. Solid hearth, can never warp or leak ashes into oven. Porcupine fire back (guaranteed twenty-five years).

Damper — Rolling damper for direct draft. Blade and handle made in two parts, easily replaced. This is the only damper required, whether used with or without reservoir.

Reservoir — Made of all copper, tinned inside. Heats by contact, i. e., the entire front of the reservoir lays close against the back of the stove and absorbs the heat continually. There is no opening into the stove back and requires no reservoir damper, therefore this system can not interfere with perfect baking. Has cast ends, cast top and japanned cover. The back of boiler is covered with an extra sheet of blue steel. Can be attached to square top stove by removing the back shelf only. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong so that the stove may be carried by the reservoir. Reservoir capacity 818 is 9 gallons; 820 is 10 gallons; 822-922 is 11 gallons.

Thermometer — Furnished with all sizes. Measures heat just as a clock measures time. It avoids bad luck when baking.

Water Heater — Arranged for four-pipe water front coil.

Triple Plated Nickel Trimmings — Oven door panel and handles, front door panel and handle, fire door handle, hearth edge, oven shelf edge, front top edge, ash guard, kicker, towel rod, shaker and cover lifter.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Cook

For Hard Coal, Soft Coal or Wood

Roman National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
818	Four 8 inch	18x19x11 $\frac{3}{4}$	25x37	351	\$.....	Deter
820	Four 8 inch	20x21x12 $\frac{1}{2}$	27x39	396	.....	Detort
920	Four 9 inch	20x21x12 $\frac{1}{2}$	27x39	399	.....	Detour
Water Front Coil fitted in Stove, Fig. 23.....			Extra		.....	Watery
Water Front Coil separate from Stove.....			Extra		.....	Water

Water Heaters described on page 11.

Description, Page 104

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Hard Coal, Soft Coal or Wood

Roman National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
818	Four 8 inch	18x19x11 $\frac{3}{4}$	25x43	422	\$.....	Detritus
820	Four 8 inch	20x21x12 $\frac{1}{2}$	27x45	470	.....	Develop
920	Four 9 inch	20x21x12 $\frac{1}{2}$	27x45	473	.....	Deviate
Copper Reservoir ordered separate from Stove				Extra	.....	Weed

Description, Page 104

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Hard Coal, Soft Coal or Wood

Guide National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
818	Four 8 inch	18x18x11½	24x34	258	\$	Despoil
820	Four 8 inch	20x20x12	26x36	291	. . . . .	Despot
920	Four 9 inch	20x20x12	26x36	294	. . . . .	Dessert

Two-Pipe Water Back Coil, Fig. 26.....Extra
If wanted with Cast Base Strips instead of Steel,.....Extra

Water Coil described on page 11.

Description, Page 126

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Hard Coal, Soft Coal or Wood

Guide National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price Galvanized Reservoir	Code Word	Price Copper Reservoir	Code Word
818	Four 8 inch	18x18x11½	24x40	303	\$.....	Destroy	\$.....	Devisor
820	Four 8 inch	20x20x12	26x42	336	.....	Detach	.....	Devolve
920	Four 9 inch	20x20x12	26x42	339	.....	Detail	.....	Devote
If wanted with Cast Base Strips instead of Steel					Extra		.....	Whisper
Copper Reservoir ordered separate from Stove					Extra		.....	Weed
Galvanized Reservoir ordered separate from Stove					Extra		.....	Web

Description, Page 126

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Hard Coal, Soft Coal or Wood

Game National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
714	Four 7 inch	14x14x 9	21 x28½	152	\$	Diadem
816	Four 8 inch	16x16x 9½	21½x30	179	. . . . .	Diagnosis
818	Four 8 inch	18x18x10	22 x31	195	. . . . .	Diameter
918	Four 9 inch	18x18x10	24 x32	198	. . . . .	Diagram
820	Four 8 inch	20x20x11	24 x34	233	. . . . .	Diandria
920	Four 9 inch	20x20x11	24 x34	235	. . . . .	Diapason
Wood Grate					Extra	Wooden

Description, Page 126

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Hard Coal, Soft Coal or Wood

Game National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
816	Four 8 inch	16x16x 9½	21½x37	224	\$.....	Diagraph
818	Four 8 inch	18x18x10	22 x38	240	.....	Dialect
918	Four 9 inch	18x18x10	24 x39	243	.....	Dialist
820	Four 8 inch	20x20x11	24 x41	278	.....	Diarian
920	Four 9 inch	20x20x11	24 x41	281	.....	Diarist
Galvanized Reservoir ordered separate from Stove.....				Extra	.....	Web
Wood Grate.....				Extra	.....	Wooden

Description, Page 126

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Steel Cook

Japanned Body

Ranger National

For Coal

Number	Holes	Ovens	Top Surface.	Weight	Price	Code Word
712	Four 7 inch	12x17x10	20x24	104	\$.....	Impeach
812	Four 8 inch	12x17x10	20x24	105	.....	Impede

Has cast top with one loose short center and heavy cast linings, shaking and dump grate self-locking; rolling damper, cast hearth, steel ash pan, drop oven door, flue clean-out under ash door, cast legs and steel skirtings. Nickel oven door panel and damper. No oven rack (inside shelf) furnished with these stoves.

NATIONAL STOVES AND FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Steel Cook

Japanned Body

Ranch National

For Coal

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
712	Four 7 inch	12x17x10	20x24	85	\$.....	Impaste
812	Four 8 inch	12x17x10	20x24	89	.....	Impatient

For Wood Only

127	Four 7 inch	12x17x10	20x24	83	.....	Lather
128	Four 8 inch	12x17x10	20x24	87	.....	Latin

Japanned steel body, steel oven with oven bottom center rib, makes them substantial.

Has cast top with one loose short center and heavy cast lining, shaking and dump grate, self-locking, rolling damper steel ash pan, drop oven door, flue clean-out under ash door, steel legs provided with bolt holes. No oven rack (inside shelf) furnished with these stoves.

NATIONAL STOVES AND FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Apollo National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
818	Four 8 inch	18x17x11	23x35	282	\$.....	Gout
820	Four 8 inch	20x19x11 $\frac{3}{4}$	25x37	332	.....	Govern
822	Four 8 inch	22x21x12 $\frac{1}{2}$	27x39	379	.....	Grab
922	Four 9 inch	22x21x12 $\frac{1}{2}$	27x39	382	.....	Grade

Four-Pipe Water Front Coil, Fig. 27. Extra

Water

Water Front described on page 11.

Description, Page 105

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Apollo National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
818	Four 8 inch	18x17x11	23x41	350	\$.....	Grail
820	Four 8 inch	20x19x11 $\frac{3}{4}$	25x43	403	.....	Grandeur
822	Four 8 inch	22x21x12 $\frac{1}{2}$	27x45	453	.....	Granger
922	Four 9 inch	22x21x12 $\frac{1}{2}$	27x45	456	.....	Granite

Copper Reservoir ordered separate from Stove.....Extra Weed

Description, Page 105

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Amboy National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
817	Four 8 inch	17x16x10½	22x32	201	\$.....	Glyph
819	Four 8 inch	19x18x11½	24x34	235	.....	Gnarl
821	Four 8 inch	21x20x12	26x36	263	.....	Gnaw
		Two-Pipe Water Back Coil, Fig. 26.....		Extra	.....	Wattle
		If wanted with Cast Base Strips instead of Steel.....		Extra	.....	Whisper

Water Coil described on page 11.

Description, Page 127

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Amboy National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price Galvanized Reservoir	Code Word	Price Copper Reservoir	Code Word
819	Four 8 inch	19x18x11½	24x40	280	\$.....	Gobble	\$.....	Grantor
821	Four 8 inch	21x20x12	26x42	308	.....	Goblin	.....	Grape
						Extra	.....	Whisper
						Extra	.....	Weed
						Extra	.....	Web

If wanted with Cast Base Strips instead of Steel.....

Copper Reservoir ordered separate from Stove.....

Galvanized Reservoir ordered separate from Stove.....

Description, Page 127

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Atlas National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
816	Four 8 inch	16x16x 9½	21½x30	168	\$.....	Gratuity
818	Four 8 inch	18x18x10	22 x31	188	.....	Gratulate
820	Four 8 inch	20x20x11	24 x34	225	.....	Grammar
920	Four 9 inch	20x20x11	24 x34	228	.....	Granary

Description, Page 127

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Atlas National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
816	Four 8 inch	16x16x 9½	21½x37	212	\$.....	Graver
818	Four 8 inch	18x18x10	22 x38	232	.....	Gravid
820	Four 8 inch	20x20x11	24 x34	270	.....	Grandson
920	Four 9 inch	20x20x11	24 x34	273	.....	Grange
Galvanized Reservoir ordered separate from Stove.....						Web

Galvanized Reservoir ordered separate from Stove..... Extra

Description, Page 127

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Savoy National

S Q U A R E

Number	Holes	Ovens	Top Surface with Shelf	Weight	Price	Code Word
816	Four 8 inch	16x16x10	21x28	162	\$.....	Glisten
818	Four 8 inch	18x18x10½	23x30	200	.....	Gloomy
918	Four 9 inch	18x18x10½	23x30	203	.....	Gloss
820	Four 8 inch	20x20x12	25x32	230	.....	Gong
920	Four 9 inch	20x20x12	25x32	233	.....	Good
Flat Coal Grate to fit No. 816.			Extra		.....	Graze
Flat Coal Grate to fit No. 818-918.			Extra		.....	Grime
Flat Coal Grate to fit No. 820-920.			Extra		.....	Grind

Description, Page 127

F I T T E D W I T H O U R W O N D E R F U L P O R C U P I N E F I R E B A C K

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Savoy National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
818	Four 8 inch	18x18x10½	23x35	248	\$.....	Glove
918	Four 9 inch	18x18x10½	23x35	251	.....	Glow
820	Four 8 inch	20x20x12	25x37	278	.....	Gopher
920	Four 9 inch	20x20x12	25x37	281	.....	Gorge
Galvanized Reservoir ordered separate from Stove.....						Web

Description, Page 127

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Signal National

S Q U A R E

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
714	Four 7 inch	14x15x 9 $\frac{3}{4}$	19x22	138	\$.....	Glazier
816	Four 8 inch	16x16x10	21x24	156	.....	Gloat
818	Four 8 inch	18x18x10 $\frac{1}{2}$	23x26	194	.....	Globate
918	Four 9 inch	18x18x10 $\frac{1}{2}$	23x26	197	.....	Globose
820	Four 8 inch	20x20x12	25x28	223	.....	Gordon
920	Four 9 inch	20x20x12	25x28	226	.....	Gossip
Flat Coal Grate to fit No. 714.....				Extra	.....	Gravy
Flat Coal Grate to fit No. 816.....				Extra	.....	Graze
Flat Coal Grate to fit No. 818-918.....				Extra	.....	Grime
Flat Coal Grate to fit No. 820-920.....				Extra	.....	Grind

Description, Page 127

FITTED WITH OUR WONDERFUL PORCUPINE FIRE BACK

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Signal National

WITH RESERVOIR

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
818	Four 8 inch	18x18x10½	23x35	242	\$.....	Gloze
918	Four 9 inch	18x18x10½	23x35	245	.....	Glue
820	Four 8 inch	20x20x12	25x37	272	.....	Gouge
920	Four 9 inch	20x20x12	25x37	275	.....	Gourd
Galvanized Reservoir ordered separate from Stove.....						Web

Description, Page 127

THE FIRE BACK IN THIS STOVE LASTS FOREVER



Excelsior Stove & Manufacturing Company



Cast Cook

For Wood Only

Comet National

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
714	Four 7 inch	14x14x9 $\frac{1}{4}$	19 $\frac{1}{2}$ x22	114	\$.....	Griev
Flat Coal Grate				Extra		Gripe

Large fire box, single fire back, solid fender, loose short front center, swing hearth slide, rolling damper.

Back Top Shelf and outside oven shelf.

Mounted without rods.

THE SINGLE FIRE BACK IN THIS STOVE IS BETTER THAN A SECTIONAL

National Stoves, Ranges and Furnaces



Cast Cook

For Wood Only

Cabin National

Number	Holes	Ovens	Top Surface	Weight	Price	Code Word
714	Four 7 inch	14x14x9 $\frac{1}{4}$	19 $\frac{1}{2}$ x22	110	\$. . .	Greet
Flat Coal Grate	.....	.....	.....	Extra	.....	Gripe

Large fire box, single fire back, solid fender, loose short front center, swing hearth slide, rolling damper. Mounted without rods.

THE SINGLE FIRE BACK IN THIS STOVE IS BETTER THAN A
SECTIONAL



Excelsior Stove & Manufacturing Company

Guide National

Cast Cook

For Hard Coal, Soft Coal or Wood

Elegant plain modeled design, always fashionable, easily kept clean, all parts subject to wear are constructed on the same plan as our high-class **NATIONALS**, which have stood the test of time. Provided with oval fire box, aluminine lined oven doors, duplex grate for coal, same grate reversed for wood, porcupine fire back (guaranteed twenty-five years), extra heavy ribbed covers and centers, cut long center, top cut in two sections, substantial center rest, mounted without rods, two-flue system which provides easy draft for soft coal, removable rolling damper, wire oven rack, swing hearth slide, steel skirtings, large sheet steel ash pan. One simmering cover furnished with each stove. Galvanized iron reservoir boiler. Boiler capacity, 818 is 8 gallons, 820-920 is 9 gallons; heats by contact, easily attached to square stove, reservoir covers japanned and striped. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong so that the stove may be carried by the reservoir. Arranged for two-pipe water back coil.

Triple Plated Nickel Trimmings — Oven door panels, front door panel, outside oven shelf, swing teapot shelf, towel rod, cover lifter and shaker.

Game National

Cast Cook

For Hard Coal, Soft Coal or Wood

An improved cast cook, modeled in plain design, with deep hearth and ash pan, wire oven rack, draw-out hearth slide, flat shake and dump grate (self-locking), aluminine lined oven doors, top cut in two sections, heavy covers, cut long center, convex oven top, the wonderful porcupine fire back (guaranteed twenty-five years), steel skirtings. Reservoir made of galvanized iron; heats by contact; reservoir covers japanned and striped. Reservoir capacity 5 gallons. The entire stove is mounted without the use of rods. Extra wood grate required when wood exclusively is to be used.

Triple Plated Nickel Trimmings — Oven door panels, front door panel, towel rod, swing teapot shelf and wire handle.

National Stoves, Ranges and Furnaces

A strictly high grade trade mark line. Contains those **NATIONAL** characteristics that make them best for the dealer and user.

Thoroughly advertised therefore easy to sell.

NATIONALS ALWAYS SATISFY

National Stoves, Ranges and Furnaces



Amboy National

Cast Cook—For Wood Only

Elegant plain modeled design, always fashionable, easily kept clean, all parts subject to wear are constructed on the same plan as our high-class **NATIONALS**, which have stood the test of time. Provided with aluminine lined oven doors, extra false wood bottom in fire box, porcupine fire back (guaranteed twenty-five years), extra heavy ribbed covers and centers, cut long center, top cut in two sections, substantial center rest, mounted without rods, two-flue system, insuring easy draft, removable rolling damper, wire oven rack, deep hearth with swing hearth slide, steel skirtings, large sheet steel ash pan. One simmering cover furnished with each stove. Galvanized iron reservoir boiler. Capacity, 819 is 8 gallons, 821-921 is 9 gallons. Heats by contact. Easily attached to square stove. Reservoir covers japanned and striped. A special fastening device allows the reservoir to be bolted to the body permanently, and is sufficiently strong so that the stove may be carried by the reservoir. Arranged for two-pipe water back coil.

Triple Plated Nickel Trimmings—Oven door panel, front door panel, outside oven shelf, swing teapot shelf, towel rod and cover lifter.

Atlas National

Cast Cook—For Wood Only

An improved cast cook, modeled in plain design, with deep low hearth and ash pan, wire oven rack, draw-out hearth slide, dump wood grate, aluminine lined oven doors, top cut in two sections, heavy covers, cut long center, convex oven top, the wonderful porcupine fire back (guaranteed twenty-five years), steel skirtings. Reservoir made of galvanized iron; heats by contact, and may be permanently bolted to the stove; reservoir covers japanned and striped. Reservoir capacity 5 gallons. The entire stove is mounted without the use of rods.

Triple Plated Nickel Trimmings—Oven door panels, front door panel, towel rod, swing and teapot shelf.

Savoy National

Cast Cook—For Wood Only

Large fire box, porcupine fire back (guaranteed twenty-five years), swing fender, cut long center, swing hearth slide, deep hearth, rolling damper, outside oven shelf, oven door kicker, back top shelf, nickelized oven door panels, mounted without rods. Reservoir made of galvanized iron; heats by contact; it may be permanently bolted to the stove; reservoir covers japanned and striped. Reservoir capacity 8 gallons.

Signal National

Cast Cook—For Wood Only

Made in every respect like the Savoy National, excepting it has no outside oven shelf, oven door panels, steel base strips, or oven door kicker.



Excelsior Stove & Manufacturing Company

WE are unable to give a written description that will do justice to the merits in National Heating stoves.

If we could have you go through our Factory (the largest Stove Plant in the West) we could show good and sufficient reason, when we say, that the care and attention given to even the minutest details are reflected in our product to the degree, that every stove is substantially perfect and insures for quality that users have a right to expect.

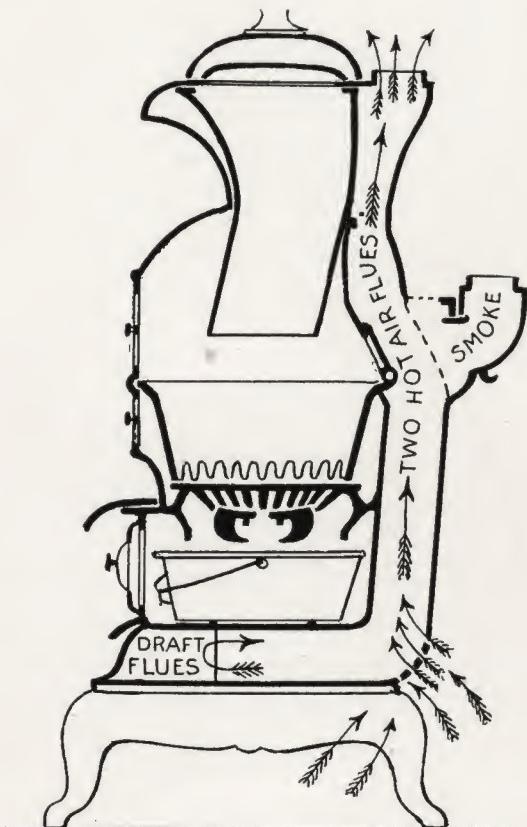


NATIONAL
HEATERS

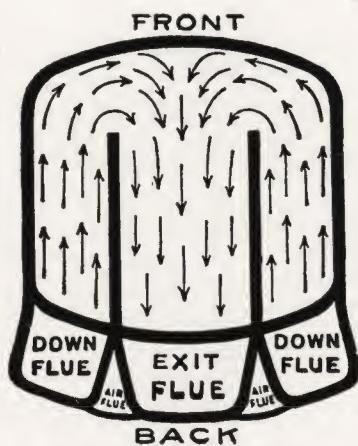
Make
comfortable
and cheerful
homes



Excelsior Stove & Manufacturing Company



Outline cut National Base Burner



Plan view of National Three flue system showing distribution of heat and the Two Ventiduct Flues.

National Base Burner

FOR HARD COAL OR COKE

This stove is especially adapted for the use of chestnut size hard coal or stove size (No. 4) hard coal; when coke is used, it should be merchantable crushed coke. This stove is a strictly high-grade construction in all its features, made with three flues, the two outer flues being the descending, and the center the ascending flue, making a total of twelve lineal feet of heat travel from the fire pot to the outlet pipe, this produces the maximum of radiation, and greatest efficiency of fuel consumed.

The ventiduct flues consist of two V-shaped air circulating flues, located between the smoke flues; these extend from the base of the stove and communicate with the exit collar in rear of dome top. These ventiduct flues produce a complete circulation of all the air in an ordinary size room, once every three hours, or eight times each day; the upward flow of air through the ventiduct flue draws the cold air not only from the floor, but from the farther corners of the room, as well as effectively heating the remote corners of the room equal to proximity of the stove. A separate warm air pipe may be attached to the exit of the ventiducts and conducted to a room on second floor if desired.

The fire pot may be revolved to equalize the wear; it is also removable through the front of the stove; two bolts on the outside of the lower front must be removed, which allow the lower front and doors to be taken off; the fire pot is then accessible.

The magazine feeder is removable through the upper front doors.

The grate is removable through the ash pit.

The magazine top and cover are machined to a true ground surface; the cover swings off the fuel opening automatically with the swing cover, and closes absolutely gas tight. Side flues in the magazine are so arranged that any gases passing upward through the fuel are drawn out and returned to the fire, where it is consumed, thereby preventing escape into the room. All doors are fitted and firmly drawn tight with turn-keys. The base door is machine fitted to a true surface, and is provided with a machine fitted draft register. The grate is the approved duplex type with shaking ring section, both of which operate outside the stove, making it convenient to use. The direct draft damper is adjustable and may be easily dismounted. Clean out flue opening is located in front of base, facilitating the cleaning of all flues. Large sheet steel ash pan. All nickel trimmings are loose and can be removed for cleaning without taking out any bolts.

Triple Plated Nickel Trimmings—Legs, three skirtings, ash door, foot rails, hearth plate, pilasters, dome, swing top, keys, knobs, and elaborate urn.

National Stoves, Ranges and Furnaces



Three-Flue Base Burner

For Chestnut or Stove Size Hard Coal

National

DOUBLE HEATER

Number	Diameter Body	Diameter Inside Top of Fire Pot	Height Less Urn	Weight	Price	Code Word
316	16 inches	14 inches	52 inches	440	\$.....	Hungry
317	17 inches	15 inches	54½ inches	468	.....	Hunks
318	18 inches	16 inches	57 inches	510	.....	Hunt

Description, Page 130

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



For Coal or Wood

With Double Hot Blast

Court National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price with Nickel Base	Code Word	Price with Plain Base	Code Word
182	12 x18 inches	42 inches	164	\$.....	Hornpipe	\$.....	Hyacinth
212	13½x21 inches	44 inches	207	.....	Horologe	.....	Hydrant

This stove is in every respect the same as our Tuinwon National, excepting it has nickelized swing top, legs and base, mica door with perforated tin, and check damper operating in rear of door panel.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Sectional Side View

For Coal or Wood

With Double Hot Blast

Tuinwon National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word
182	12 x18 inches	42 inches	154	\$.....	Herbarium
212	13½x21 inches	44 inches	195	.....	Herdsman

Description, Page 141

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



For Soft or Hard Coal



Sectional view showing Oscillating Hot Blast-Tube and Ash Pan

With Hot Blast Tube

Thermal National

No.	Diameter Steel Body	Height Less Urn	Shipping Weight	Price	Code Word
12	12 inches	37½	110	\$	Sadden
14	14 inches	39½	135	.....	Saddle
16	16 inches	41½	155	.....	Sadness
18	18 inches	43½	182	.....	Saffron

This stove is the same as our Blastaer National shown on opposite page excepting it is provided with a steel ash pan and large ash door.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



For Soft or Hard Coal

With Hot Blast Tube

Blastaer National

No.	Diameter Steel Body	Height Less Urn	Shipping Weight	Price	Code Word
12	12 inches	37½	105	\$.....	Saber
14	14 inches	39½	128	.....	Sabian
16	16 inches	41½	157	.....	Sable
18	18 inches	43½	177	.....	Sabulus

Nickel Trimmings — Swing top, foot rails, top ring, name plate, damper, urn and keys.

This stove is a strictly airtight construction, the body is made of heavy gauge Polished Steel, bottom is double seamed to the body, the legs fasten into cast iron cleats, skirtings bolt to legs, check draft in collar, extra large top feed opening, draw center grate. It has no ash pan.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



For Soft or Hard Coal

Extra Wood Grate if Desired

Crest National

HOT BLAST AND AIR CIRCULATOR

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word	Price with Hard Coal Magazine	Code Word
163	16 inches	52½ inches	323	\$.....	Hyemal	\$.....	Hypnotic
183	18 inches	56 inches	367	.....	Hygelan	.....	Hyphen
203	20 inches	58 inches	431	.....	Hymen	.....	Hyson
Wood Grate			Extra	Wooden		.....

Description, Page 141

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



For Soft or Hard Coal

Extra Wood Grate if Desired

Oakland National

WITH CYCLONE BLAST DRAFT

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word	Price with Hard Coal Magazine	Code Word
162	15 inches	48 inches	179	\$.....	Hapless	\$.....	Handmaid
182	17 inches	51½ inches	219	.....	Happiness	.....	Handsaw
202	19 inches	53½ inches	249	.....	Harbinger	.....	Handspike
202½ with 1½ Section Steel Body.....	73½ inches	268	.....	Hardiness	.....	.....	.....
Wood Grate.....				Extra	.....	.....	Wooden
If wanted with Plain Cast Base instead of Steel.....				Extra	.....	.....	Worse
If wanted with Nickel Cast Base instead of Steel.....				Extra	.....	.....	Worth

Description, Page 141

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



With Hot Blast Tube

For Soft Coal or Wood

Social National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word
112	10 inches	36 inches	78	\$.....	Hurtful
132	12 inches	39 inches	100	.....	Hussar
152	14 inches	42 inches	121	.....	Hustle
172	16 inches	44 inches	149	.....	Hutch
192	18 inches	47 inches	188	.....	Huzza
Wood Grate			Extra	.....	Wooden

Wood Grate

Hot Blast Heater of medium price and new design. Oscillating hot blast tube, shaking and draw center grate, cast bottom, corrugated fire pot, polished steel body and skirtings, sheet steel ash pan. Removable nickel trimmings.

Triple Plated Nickel Trimmings — Swing top, foot rails, pilasters, top ring, feed door panel, damper, keys and urn.

**BLAST TUBE IN THIS STOVE SAME AS THERMAL AND
BLASTAER NATIONAL**

National Stoves, Ranges and Furnaces



For Soft or Hard Coal

Silver National

Extra Wood Grate if Desired

Number	Diameter Top of Fire Pot	Height Less Urn	*Weight	Price	Code Word	Price with Hard Coal Magazine	Code Word
112	10 inches	36 inches	76	\$.....	Hautboy	\$.....	Heather
132	12 inches	39 inches	97	.....	Hauteur	.....	Heating
152	14 inches	42 inches	118	.....	Haziness	.....	Heaves
172	16 inches	44 inches	144	.....	Headland	.....	Heaviness
192	18 inches	47 inches	187	.....	Headlong	.....	Hebraist

Wood Grate.....

With Smoke Collar on back.....

Elaborate medium priced oak heating stove, has large feed door with smoke curtain, shaking and draw center grate, shakes through side of base, cast bottom, corrugated fire pot, polished steel body and skirtings, sheet steel ash pan. Removable nickel trimmings.

Can be furnished with round smoke collar on rear of body instead of on main top, a convenience to connect to low flue openings.

Triple Plated Nickel Trimmings—Swing top, foot rails, pilasters, top ring, feed door panel, damper, keys and urn.

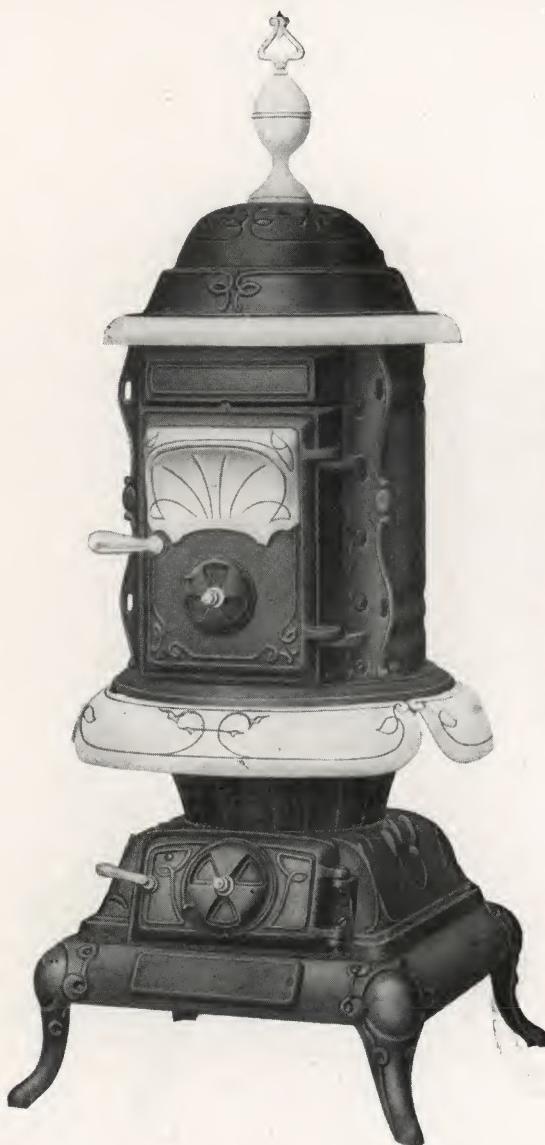
Hard Coal Magazine can be used only when stove is furnished with smoke collar on back.

*Weight shown is for stove regular.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Sectional View, showing Natural Gas Ring attached to Staple National

Full description of Gas Ring.
Page 159

For Soft or Hard Coal

Staple National

Number	Diameter Top of Fire Pot	Height Less Urn	*Weight	Price	Code Word	Price with Natural Gas Ring	Code Word	†Price with Hard Coal Magazine	Code Word
112	10 inches	36 inches	71	\$.....	Hectic	\$.....	Hemisphere	\$.....	Henchman
132	12 inches	39 inches	90	.....	Heedless	.....	Hemistich	.....	Hencoop
152	14 inches	42 inches	114	.....	Hegemony	.....	Hemitrope	.....	Henpecked
172	16 inches	44 inches	138	.....	Heighten	.....	Hemisap	.....	Herbalist
192	18 inches	47 inches	177	.....	Heinous	.....	Extra	.....	Herculean
Wood Grate							Extra	.....	Wooden
With Smoke Collar on back.							Extra	.....	Harping

†List with Hard Coal Magazine does not include Natural Gas Ring.

Medium priced oak, newest design, has large feed door with smoke curtain, shaking and draw center grate shakes through side of base, cast bottom, corrugated fire pot, polished steel body and skirtings, sheet steel ash pan. Removable nickel trimmings. Can be furnished with round smoke collar on rear of body, instead of on main top, a convenience to connect with low flue openings.

Triple Plated Nickel Trimmings — Foot rails, top ring, feed door panel, damper keys and urn.

Hard coal magazine can be used only when stove is furnished with smoke collar on back.

*Weight shown is for stove regular.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Crest National

For Hard Coal, Soft Coal or Coke

Our Crest National is an elaborate parlor heater. It is extra heavy and substantial, with polished steel body, corrugated fire pot, triangular grate which consists of four bars that are coupled in pairs and permits shaking half the grate at a time. The grate bars may be removed without taking the stove apart. A loose cover over the cogs and a front bar permit the grate to be removed in sections through the ash pit opening. A special arrangement of the grate shaker prevents the operator from leaving the grate in a wrong position.

Large feed door with smoke curtain, automatic poke hole and mica illumination. The mica is guarded with perforated tin. Check damper in smoke collar, bar lock on doors, deep base with screw draft and steel ash pan, blast ring arranged entirely within the stove heats uniformly. The air is supplied directly into the blast ring under the feed door. This method supplies the fuel with the greatest possible amount of oxygen and thoroughly consumes the escaping smoke and gases.

The double heater consists of two circulating flues on the rear of stove. These flues pass through the base with openings under the stove, cold air being drawn from the floor passes the fire pot and body to the outlets above. The results of this air circulation may be noted in the fact that the farther corners of the room will be as warm as near the stove.

Triple Plated Nickel Trimmings—Legs, skirtings, four foot rails, pilasters, name plate, draft plate, top ring, swing top, urn, grate shaker and keys.

Oakland National

With Cyclone Hot Blast Draft

For Hard Coal, Soft Coal or Wood

High grade oak heating stove, heavy and substantial in all parts. The cyclone draft consists of a damper under the feed door and a cast section of ring over the top of fire pot; the length of this ring corresponds with the width of the cast front. The air enters this damper and is heated. It is then discharged from both ends of the ring in a swirling motion over the fire, supplying the necessary oxygen to completely consume the hydro-carbons from the fuel. The feed door is extra large and machine fitted, base door and base door damper are machine fitted, which insures an air-tight stove and a thoroughly good fire keeper. Polished hard steel body with overlapping flange where the body connects to the cast front, will never warp between the bolting places; the steel body is connected to the fire pot with our self-sealing joint. Corrugated straight form fire pot. Large center heat deflecting ring. Improved pattern shaking and draw center grate, shakes through ash door damper opening; grate removable without taking stove apart. Solid one-piece base with cast iron bottom. Never-break polished steel skirtions. Large sheet steel ash pan, smoke curtain in feed door. Mica feed door with outside mica frame. The mica is protected with perforated tin. The nickel top ring is made of cast iron in four sections; all nickel parts are removable.

Triple Plated Nickel Trimmings—Swing top, top ring, feed door panel, three sections of foot rails, pilasters, legs, ash door damper, keys and elaborate urn.

Tuinwon National

For Coal or Wood

An oval heater, adapted for coal or wood fuel. Provided with duplex grates for coal, same grate reversed for wood; has extra side cast lining inside the fire pot; these linings are perforated and cover an opening in the base which admits air between the linings and fire pot, thus furnishing hot blast to the fire; this in conjunction with the tube blast from the top makes a double blast that burns coal with the greatest efficiency. The oval shape of this stove adapts it to long lengths wood, making a perfect two-in-one stove. Heavy steel body, deep ash pit with sheet steel ash pan, large feed door with smoke curtain, steel skirtions.

Triple Plated Nickel Trimmings—Top ring, feed door panel, pilasters, foot rails, damper keys and urn.



Excelsior Stove & Manufacturing Company



For Soft or Hard Coal

Low Priced Jr. Heater

Dash National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word	Price with Natural Gas Ring	Code Word
511	10 inches	34½ inches	58	\$.....	Paddle	\$.....	Paint
513	12 inches	36½ inches	71	.....	Paddock	.....	Pair
515	14 inches	39 inches	88	.....	Pagan	.....	Pale
517	16 inches	41 inches	116	.....	Palate	.....	Pallet
Ash pan, each						Extra	Worthy

Blue steel body, draw center grate, shakes through side of base, swing top, deep fire pot, steel skirtings, cast bottom, nickel trimmings, three foot rails, pilasters, swing top, screw dampers, urn and top ring.

NATIONAL QUALITY AND EFFICIENCY



Full description of natural gas ring
page 159

National Stoves, Ranges and Furnaces



Full description of
Natural Gas Ring
page 159

For Soft or Hard Coal

Low Priced Jr. Heater

Derby National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word	Price with Natural Gas Ring	Code Word
511	10 inches	34½ inches	55	\$.....	Pallid	\$.....	Panacea
513	12 inches	36½ inches	67	.....	Palmy	.....	Panary
515	14 inches	39 inches	83	.....	Paltry	.....	Punch
517	16 inches	41 inches	110	.....	Pamper	.....	Pander
Ash pan, each.....						Extra	Worthy

Ash pan, each.....

Blue steel body, draw center grate, shakes through side of base, swing top, deep fire pot, steel skirtings, cast bottom. Nickel trimmings, three foot rails, screw dampers, urn and top ring.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



All Cast



Sectional View

For Coal or Wood

Mascot National

No.	Size Top of Fire Box	Size Inside of Body	Height Less Urn	Weight	Price	Code Word
18	9x15	11 1/4x18	31 1/2	207	\$.....	Sapiant
20	9x17	11 1/4x20	33 1/2	226	.....	Sapling
22	10x19	12 1/2x22	35 1/2	250	.....	Saponify

An all cast heater with Duplex grate for coal, reversing the grate and removing the end linings converts it into a wood stove. Mica and perforated tin in front door, double end doors, deep ash pit with sheet steel ash pan, hot blast cast linings made in four sections, swing top, griddle hole in main top, reversible smoke collar.

Nickel trimmings consist of front panel, hearth plate, front draft damper, name plate, urn and keys.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



All Cast



Sectional End View

For Coal or Wood

Saxon National

Number	Size, Top of Fire Pot	Size Inside of Body	Height Less Urn	Weight	Price	Code Word
14	7 1/2x12 inches	10 1/2x14 inches	27 inches	120	\$.....	Pacer
16	7 1/2x14 inches	10 1/2x16 inches	29 inches	134	.....	Pacha
18	8 3/4x16 1/2 inches	11 1/4x18 inches	31 1/2 inches	160	.....	Pacify
20	8 3/4x16 1/2 inches	11 1/4x20 inches	33 1/2 inches	181	.....	Pack
22	10 x18 1/2 inches	12 1/2x22 inches	35 1/2 inches	212	.....	Pane

An all cast coal heater convertible to a wood stove. It is provided with a mica and perforated tin in front feed door for coal, and double end feed door for wood, griddle hole in top, reversible smoke collar, swinging top. The grate shakes through the front draft damper opening. The coal fire pot and grate are removable through the end doors, thereby converting it into a wood stove. It is provided with a large sheet steel ash pan.

Nickel trimmings consist of front panel, hearth plate, damper, name plate, urn and keys.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company

Loyal National

Hot Blast Down Draft

For Wood Only

Linings are extra heavy, and cast in three sections, which can be mounted in or taken out after the stove is put together. Automatic damper operates in conjunction with the door; the damper rod extends through the front of the stove, accessible to the operator when it is desired to use the damper independently. Mounted with Polished Steel Body.

Reversible Collars — The smoke collar on these stoves can be set either in a horizontal or vertical position, which facilitates the pipe fittings.

Draft damper is located in the top of feed door, and has inside cast duct extending down to the hearth line, which produces hot blast. The hearth slide can be drawn out to admit lower draft. Every stove is provided with a smoke curtain at the top of feed door. This, in connection with the automatic damper, prevents any liability of smoke escaping when the feed door is opened.

Triple Plated Nickel Trimmings — Double faced front and back top ornaments, swing top, urn, name plate, foot rails, and keys.

Elwood National

For Wood Only

An elaborate parlor stove for wood, with all the latest improvements that make for comfort and convenience. Large end feed door, ash door and ash pan, cast grate and cast linings, cast top and bottom, reversible smoke collar to accommodate low chimney flues. Heavy polished steel body and four ventiduct flues on the corners that take the cold air off from the floor and discharge it out of the top. Mica in front protected with perforated tin, extra heavy wood grate, check damper in top, ventiduct flues are removable, draft enters over the grate. The top is provided with one 8-inch cover, legs bolted on.

Triple Plated Nickel Trimmings — Swing top, front top edge, foot rail, name plate, keys and elaborate urn.

Norwood National

For Wood Only

This is the last word in parlor wood stoves. The construction covering every feature that can make it of the highest possible class for efficiency, durability and convenience. It is made with heavy polished steel body, solid cast iron linings which are demountable. An extra long and deep ash pit provided with a large, strong, steel ash pan. Loose bottom wood grate, double fire doors, deep cast top with deflector and check damper. Mica in feed door, protected with perforated tin. The No. 21-24 and 24-27 are provided with one 9-inch cover, the No. 26-30 has two 7-inch covers and one loose center. Handsome demountable nickel trimmings. The bodies of these stoves are extra high, which provides additional radiating surface and permits the use of extra long wood.

National Stoves, Ranges and Furnaces



All Cast

For Coal

Depot National

Number	Diameter Top of Fire Pot	Height Less Urn	Weight	Price	Code Word
19	19 inches	43½ inches	258	\$.....	Harp
21	21 inches	46½ inches	313	.....	Harper

The Depot National has a large feed door, shaking and dumping grate. It has a broad flat top, which provides a warming space. It is made extra heavy throughout, and is just the heater for depots, offices, warehouses and other places where stoves are subjected to hard usage.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



All Cast

For Coal or Wood

Station National

Number	Diameter Top of Fire Pot	Height	Weight	Price for Coal	Code Word	Price for Wood	Code Word
20	20 inches	54 inches	519	\$.....	Heal	\$.....	Headway
24	24 inches	60 inches	747	.....	Heam	.....	Health
20D	20 inches	74 inches	533	.....	Hearse	.....	Hearsay
24D	24 inches	84 inches	765	.....	Heart	.....	Hearth
Wood Grate					Extra	.....	Wooden

Wood Grate

NOTE — D indicates this stove with steel drum extension. See Page 149.

The Station National is as large and powerful as a furnace. It is made extra strong to withstand heavy usage in railroad stations, stores, warehouses, etc. The entire body is made of cast iron. It is provided with double feed doors, draw center grate, griddle hole in top. Grate shakes through side of base.

Size of double feed door openings

No. 20 11x16½ inches No. 24 13x20½ inches

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Nos. 20D and 24D

See Description Opposite Page

Station National

THE LARGEST HEATING STOVE MADE IN THE WORLD



Excelsior Stove & Manufacturing Company



Cannon National

For Coal

Number	Diameter Top of Fire Pot	Height	Weight	Price	Code Word
14	10½ inches	36 inches	92	\$.....	Holdfast
16	12 inches	38 inches	107	.....	Holiday
18	13½ inches	41 inches	139	.....	Hollands
20	16 inches	49 inches	225	.....	Homestead
22	19 inches	53 inches	314	.....	Homeward

A smooth finish cannon stove, has shaking and dump grate, slide draft ring, large ash space, flat top with cover hole, arranged to use sheet steel drum if desired.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Globe National

For Coal

Number	Diameter Top of Fire Pot	Height	Weight	Price	Code Word
3	9 inches	22 inches	35	\$.....	Hardly
4	10 inches	23 inches	43	.....	Hardy
5	11 inches	26 inches	53	.....	Hare
6	12 inches	27 inches	67	.....	Hydra
7	13 inches	31 inches	79	.....	Hark

Our Globe National is a very handsome, low price pattern cannon stove. It is made of the same grade of material and workmanship as all Nationals, which insure neat castings and fittings. Sheet steel drum may be mounted on these stoves without the use of extra ring.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Irving National

For Coal

Number	Holes	Height of Stove	Top Space	Weight	Price	Code Word
82	Two 8 inch	24 inches	15x22½	138	\$.....	Hydrogen
Gallons of water heated per hour.....						75
Square feet direct radiation.....						50

A laundry and garage stove with water-heating fire pot. The entire pot is made to heat water connected to a pressure boiler. A division inside the water space insures perfect circulation without noise and heats a large amount of water. Provided with sheet steel ash pan, steel base, cast bottom.

NOTE — Price does not include the pressure boiler or pipe connections.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Cast Cook With Four Holes

Steel Oven

Unique National

With Elevated Oven

For Soft or Hard Coal

Number	Holes	Oven	Cooking Surface	Weight	Price	Code Word
84	Four 8 inch	18x16x12	23x26	166	\$.....	Hosiery
Height to cooking surface.						25½ inches
Height to oven bottom.						43½ inches
Height to top of oven.						59 inches

Description, Page 159

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



**Joy National
For Coal**

Number	Holes	Diam. Top of Fire pot	Height of Stove	Top Space	Weight	Price	Code Word
80	Two 8 inch	9 1/4	19 1/2	11 1/2x19 1/2	39	\$	Habitude

A first-class low priced laundry stove, has dumping grate, swing feed and ash door, sheet steel bottom large ash space.



Charm National

Nos. 83 and 38—For Coal

Number	Holes	Diam. Top of Fire Pot	Height of Stove	Top Space	Weight	Price	Code Word
83	Two 8 inch	10 1/2	21 1/2	15x21	62	\$	Habit
38	Two 8 inch	12	21 1/2	15x21	68	. . . . .	Hack
83WC	Two 8 inch	10 1/2	21 1/2	15x21	67	. . . . .	Sanable

Large tops, fancy base, cone center or draw center grate, corrugated fire pot, extra large feed door, large ash pit. Cone center grate shipped unless otherwise ordered.

Charm National

No. 83WC—With Water Coil For Coal

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



**Charm National
For Coal**

Number	Holes	Diam. Top of Fire Pot	Height of Stove	Top Space	Weight	Price	Code Word
86	Two 8 inch	10½	23	15x21	64	\$.....	Hail

Large tops, fancy base, cone center or draw center grate, extra large ash pit. Cone center grate shipped unless otherwise ordered. Will hold eight irons, any shape.



This cut illustrates the gas ring which is placed between the fire pot and base, either coal or natural gas may be used without further changes.

For Gas ring fitted in stove order No. 82 G. R.

**Tip-Top National
For Coal**

Number	Holes	Diam. Top of Fire Pot	Height of Stove	Top Space	Weight	Price	Code Word
83	Two 8 inch	10¼	22	14½x20½	67	\$.....	Hush
82	Two 8 inch	11	22½	15 x22½	81	.....	Holm
82GR	Two 8 inch	11	23½	15 x22½	96	.....	Sandal

This is an extra large laundry stove, mounted on steel skirtings; it has shaking and draw center grate, swing feed door.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



**Charm National
For Coal**

Number	Holes	Diam. Top of Fire Pot	Height Stove	Top Space	Weight	Price	Code Word
84	Four 8 inch	12	21½	21½x21½	90	\$.....	Hackney

Large top, fancy base, cone center or draw center grate, corrugated fire pot, extra large ash pit. Cone center grate shipped unless otherwise ordered.



**Charm National
For Coal**

Number	Holes	Diam. Top of Fire Pot	Height of Stove	Top Space	Weight	Price	Code Word
89	Four 8 inch	12	23	21½x21½	96	\$.....	Hairy

Large top, fancy base, cone center or draw center grate, extra large ash pit. Cone center grate shipped unless otherwise ordered. Will hold eight irons, any shape.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Sectional View
Showing Water Back Attached

This cut illustrates the gas ring which is placed between the fire pot and base, either coal or natural gas may be used without further changes. When heating water with gas, artificial fuel must be used.

For Gas Ring fitted in Stove Order No. 84 GR

Tip-Top National

For Coal

Number	Holes	Diam. Top of Fire Pot	Height of Stove	Top Space	Weight	Price	Code Word
84	For 8 inch	13½ inch	25 inch	22½x23½	115	\$.....	Hortos
84 GR	For 8 inch	13½ inch	26 inch	22½x23½	137	.....	Sandy
Water Back fitted.....				.Extra		.....	Wily
Water Back separate.....				.Extra		.....	Winee

Unless otherwise ordered, we ship stoves without the water back. If ordered with water back fitted, we drill the necessary water pipe holes through the stove.

Capacity water back, gallons per hour..... 50

See Description, Page 155

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Tailor National

For Coal

Number	Diameter Fire Pot	Number of Irons	Height	Weight	Price	Code Word
99	14 inches	9	42 inches	154	\$.....	Hatchway

This stove is provided with an oval top, which has two 8-inch holes and short center, adapted for the use of a wash boiler. It will accommodate the largest size Tailors Goose Irons, has shaking and draw center grate, extra large ash pit.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



National Stoves, Ranges and Furnaces

Are a product kept up-to-date, in all the improvements and refinements known to the art, that materially aids the dealer in making sales, and assures the user the service he has a right to expect.

Unique National

With Elevated Oven

For Soft or Hard Coal

A perfect baking elevated oven with drop oven door and wire supports when open, nickel turnkey at top, two wire oven racks, flue clean-out openings to all flues. All the products of combustion pass up through the 7-inch stove-pipe to the oven, which is provided with a dividing flue strip in the bottom flue, which diverts the heat current absolutely into two equal parts, and forces an even distribution around the oven to the outlet pipe at the top. The smoke pipe is provided with our control damper which regulates the fire and also the heat that passes around the oven. The main top of the oven is made of all cast iron with a six-inch cover hole on each side of the pipe outlet, these serve as a convenience to clean the soot from the side and top flues of the oven. The entire oven and brackets are finished in dead black wrought iron color. Stove has four 8-inch cooking holes with loose covers and centers, pouch feed, draw center grate, cast side shelves, large steel ash pan, steel bottom and skirtings, corrugated fire pot, nickel damper, name plate and oven trimmings.

Natural Gas Ring

This consists of a two-part ring adapted expressly for using natural gas. Designed to fit between the fire pot and base. The gas orifices are drilled perfectly true to size. The gas inlet is on a tangent line with the curved ring, which induces a free distribution of gas throughout the entire ring. An overhanging edge protects the gas orifices from ashes entering the gas ring when coal fire is used. This arrangement permits the use of coal at any time the gas supply fails from any cause.



Excelsior Stove & Manufacturing Company



With Blue Polished Steel Body

For Wood Only

Loyal National

Number	Length Wood	Weight	Price Mounted Complete	Code Word
27	25 inches	175	\$.....	Emulator
29	27 inches	178	.....	Emulous
31	29 inches	180	.....	Emulsion

See Description, Page 146

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



All Cast

For Wood Only

Kenton National

Number	Size Inside of Body	Height Less Urn	Weight	Price	Code Word
14	10½x14 inches	27 inches	97	\$.....	Ethics
16	10½x16 inches	29 inches	110	.....	Ethology
18	11¼x18 inches	31½ inches	134	.....	Etiolate
20	11¼x20 inches	33½ inches	146	.....	Etymon
22	12½x22 inches	35½ inches	195	.....	Eulogy

An all cast heater with double end feed doors, mica front door (the mica is protected with perforated tin), griddle hole in top, reversible smoke collar, swinging top. Spark guard over front draft, ash guard in end feed door.

Nickel Trimmings—Consists of front panel, hearth plate, damper, name plate, urn and keys.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Blue Polished Steel Body

For Wood Only

Norwood National

Number	Length	Width	Height Lining	Height Inside Body	Weight	Price	Code Word
21-24N	21 inches	15 inches	11 inches	24 inches	185	\$.....	Estimable
24-27N	23 inches	17 inches	12½ inches	27 inches	223	.....	Estimation
26-30N	25½ inches	19 inches	14 inches	30 inches	255	.....	Estival

Description, Page 146

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Blue Polished Steel Body

For Wood Only

Norwood National

Number	Length	Width	Height Lining	Height Inside Body	Weight	Price	Code Word
21-24P	21 inches	15 inches	11 inches	24 inches	179	\$.....	Esplanade
24-27P	23 inches	17 inches	12½ inches	27 inches	217	.....	Esteem
26-30P	25½ inches	19 inches	14 inches	30 inches	247	.....	Esthetic

Description, Page 146

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Blue Polished Steel Body

For Wood Only

Elwood National

Number	Length	Width	Height Less Urn	Weight	Price	Code Word
18	18 inches	14 inches	31 inches	145	\$.....	Errand
21	21 inches	16 inches	34 inches	165	.....	Erratic
24	24 inches	17 inches	37 inches	200	.....	Errhine

Description, Page 146

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Blue Polished Steel Body

For Wood Only

Boxwood National

Number	Length	Width	Height Less Urn	Weight	Price	Code Word
18	18 inches	14 inches	31 inches	145	\$.....	Estop
21	21 inches	16 inches	34 inches	160	.....	Estrange
24	24 inches	17 inches	37 inches	190	.....	Estuary

This stove is in every respect like our Elwood National on preceding page, except it has no wood grate or ash pan, the fire resting on the cast bottom. It is also provided with a register damper in the ash door.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Showing stove with extra wood grate



With Swinging Top

Floral National

For Wood Only

Number	Holes	Length Wood	Height Less Urn	Weight	Price	Code Word	Price with Wood Grate	Code Word
186N	One 7 inch	18 inches	25 inches	77	\$.....	Epigraph	\$.....	Epitaph
226N	One 8 inch	22 inches	27 inches	91	.....	Epilepsy	.....	Epithet
256N	One 8 inch	25 inches	28½ inches	101	.....	Epilogue	.....	Epitome
286N	Two 7 inch	28 inches	30½ inches	117	.....	Epiphany	.....	Epoch

Always shipped without Wood Grate unless otherwise ordered.

Made with extra heavy blue steel body, deep solid one-piece cast corrugated bottom; large swinging ash door, steel body mounts inside the cast bottom, cast lining all around the inside lower edge of steel body, mounted without rods, legs and rails bolt on, swinging top, large feed opening, cast front and door.

DESCRIPTION OF WOOD GRATE ..

Wood grate consists of a heavy flat false bottom supported above the ash door and designed as a support for the fuel. Perforations allow ashes to fall away from the fire into the lower pit. This maintains a clean fire at all times and allows the ashes to be removed without disturbing the fire.

Nickel Trimmings — Urn, swing top, foot rails, name plate, damper and keys.

National Stoves, Ranges and Furnaces



With Swinging Top

For Wood Only

Floral National

Number	Holes	Length Wood	Height	Weight	Price	Code Word	Price With Wood Grate	Code Word
186P	One 7 inch	18 inches	23 inches	67	\$.....	Epicure	\$.....	Epode
226P	One 8 inch	22 inches	25 inches	77	.....	Epidemic	.....	Equable
256P	One 8 inch	25 inches	26½ inches	85	.....	Epigaeal	.....	Equalize
286P	Two 7 inch	28 inches	28½ inches	100	.....	Epigram	.....	Equally
Nickeled Foot Rails No. 186, per pair.						Extra	.....	Wolly
Nickeled Foot Rails No. 226, per pair.						Extra	.....	Wollen
Nickeled Foot Rails No. 256, per pair.						Extra	.....	Wolfel
Nickeled Foot Rails No. 286, per pair.						Extra	.....	Woodblue

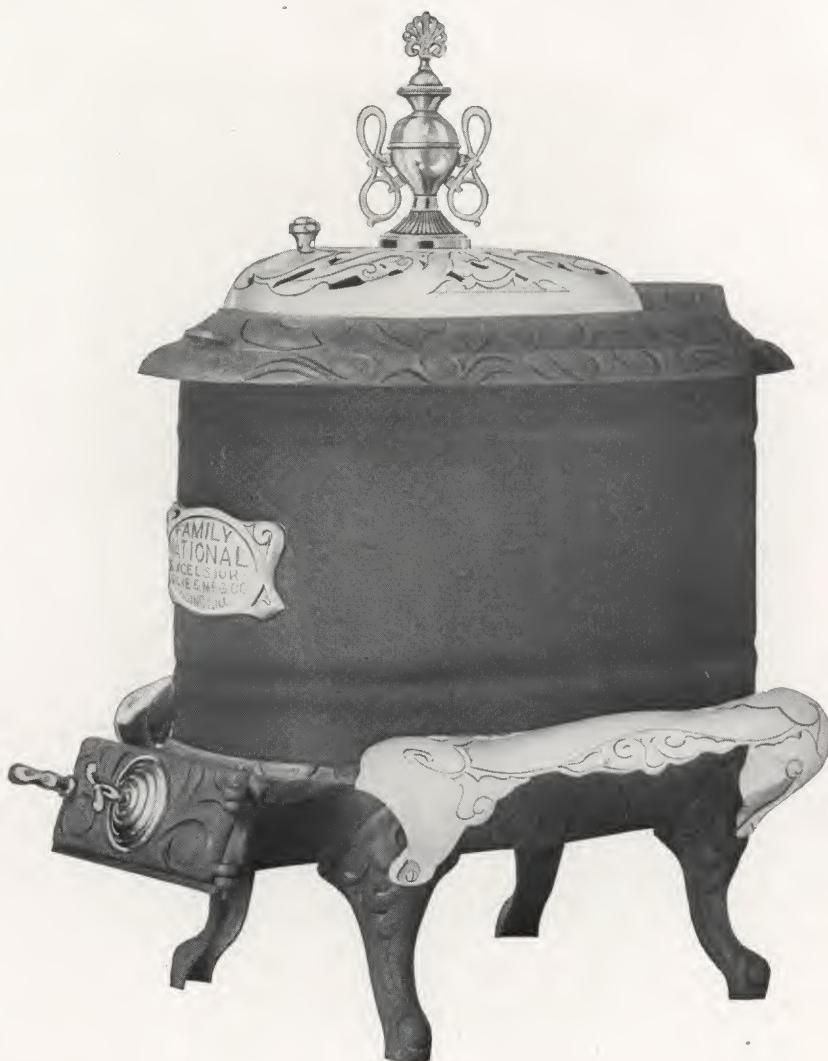
Always shipped without Wood Grate unless otherwise ordered.

Made with extra heavy blue steel body, deep solid one-piece cast corrugated bottom, large swinging ash door, steel body mounts inside the cast bottom, cast lining all around the inside lower edge of steel body, mounted without rods, legs bolt on, swinging top, large feed opening, cast front and door.

Description of Wood Grate, See Opposite Page



Excelsior Stove & Manufacturing Company



With Swinging Top

For Wood Only

Family National

Number	Holes	Length of Wood	Height Less Urn	Weight	Price	Code Word	Price With Wood Grate	Code Word
186N	One 7 inch	18 inches	25 inches	70	\$.....	Envenom	\$.....	Equation
226N	One 8 inch	22 inches	27 inches	83	.....	Enviable	.....	Equator
256N	One 8 inch	25 inches	28½ inches	91	.....	Envious	.....	Equerry
286N	Two 7 inch	28 inches	30½ inches	109	.....	Environ	.....	Equiform

For extra Wood Grates see Floral National, page 166.

Always shipped without Wood Grate unless otherwise ordered.

Made with extra heavy blue steel body, deep solid one-piece cast corrugated bottom, large swinging ash door, steel body mounts inside the cast bottom, cast lining all around the inside lower edge of steel body, mounted without rods, legs and rails bolt on, swinging top feed opening, nickel urn, swing top, foot rails, name plate, damper and keys.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



With Swinging Top

For Wood Only

Family National

Number	Holes	Length of Wood	Height	Weight	Price	Code Word	Price with Wood Grate	Code Word
186P	One 7 inch	18 inches	23 inches	60	\$.....	Entomb	\$.....	Equine
226P	One 8 inch	22 inches	25 inches	69	.....	Entonic	.....	Equinox
256P	One 8 inch	25 inches	26½ inches	75	.....	Entrance	.....	Equipage
286P	Two 7 inch	28 inches	28½ inches	91	.....	Entrap	.....	Equitable
Nickeled Foot Rails No. 186, per pair.....								
Extra								
Nickled Foot Rails No. 226, per pair.....								
Extra								
Nickled Foot Rails No. 256, per pair.....								
Extra								
Nickled Foot Rails No. 286, per pair.....								
Extra								

For extra Wood Grates see Floral National, page 166.

Always shipped without Wood Grate unless otherwise ordered.

Made with extra heavy blue steel body, deep solid one-piece cast corrugated bottom, large swinging ash door, steel body mounts inside the cast bottom, cast lining all around the inside lower edge of steel body, mounted without rods, legs bolt on, nickel name plate, damper and keys.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



With Swinging Top

For Wood Only

Fame National

Number	Holes	Length Wood	Weight	Price Crated	Code Word	Price Not Crated	Code Word
201	One 7 inch	20 inches	60	\$.....	Employ	\$.....	Eulogist
221	One 7 inch	22 inches	79	.....	Employee	.....	Eulogize
251	One 7 inch	25 inches	94	.....	Employer	.....	Eulogium
281	Two 7 inch	28 inches	119	.....	Emporium	.....	Eupepsy
301	Two 7 inch	30 inches	121	.....	Empower	.....	Euphonic
321	Two 8 inch	32 inches	156	.....	Empress	.....	Euphony
361	Two 8 inch	36 inches	180	.....	Empty	.....	Evacuate
381	Two 8 inch	38 inches	186	.....	Emulate	.....	Evaporate

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Cast Heater

For Wood Only

National Box

With Removable Top

Number	Cooking Hole	Top Opening	Size Opening Fire Door	Length Wood	Weight	Price	Code Word
55	One 9 inch	13x32	15x23	48 inch	557	\$.....	Episode
53	Flue Drum to fit this Stove			Extra	77	.....	Wisdom

An extra large wood heater, designed for rough usage. It accommodates cord wood lengths without sawing. Built in the most substantial manner. The rods are thoroughly protected from the fire, the top, sides and bottom are cut in sections to prevent cracking. Provided with 8-inch smoke collar. Legs fit into duffs.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Wonder National

Air Tight Wood Heater

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
221A	21 inches	16 inches	18 inches	65	\$.....	Eviction
226A	26 inches	18 inches	24 inches	85	.....	Evidence
Nickel Foot Rails, per pair, all sizes.....				Extra	.....	Eradiate
Nickel Top Ring for 221.....				Extra	.....	Erasable
Nickel Top Ring for 226.....				Extra	.....	Erasion
Nickelized Feet per set.....				Extra	.....	Wrap



Number	Length	Width	Body Height	Weight	Price	Code Word
221B	21 inches	16 inches	18 inches	75	\$.....	Evince
226B	26 inches	18 inches	24 inches	95	.....	Evoke
Nickelized Feet and Base.....				Extra	.....	Wrist

Price includes cast base and nickel foot rails.



Number	Length	Width	Body Height	Weight	Price	Code Word
221C	21 inches	16 inches	18 inches	81	\$.....	Evolve
226C	26 inches	18 inches	24 inches	101	.....	Exact
Nickelized Feet and Base.....				Extra	.....	Wrist

Price includes cast base, nickel foot rails, nickelized top ring.

DESCRIPTION

Steel linings in all sizes, lined close to the top and reinforced with cast plate inside the draft opening, the cast elbow is made in one piece, solid cast top with check draft damper.

Nickel urn and name plate on all sizes.

Length of stove is without front draft pipe.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Welcome National

Air Tight Wood Heater

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
18A	18 inches	14 inches	15 inches	39	\$.....	Equity
121A	21 inches	16 inches	18 inches	44	.....	Equivalent
24A	24 inches	17 inches	24 inches	55	.....	Equivocal
26A	26 inches	18 inches	24 inches	60	.....	Equivocate
Nickel Foot Rails, per pair, all sizes			Extra		.....	Eradiate
Nickel Top Ring for 121			Extra		.....	Erasable
Nickel Top Ring for 26			Extra		.....	Erasion
Cooker Pan for 18-121			Extra		.....	Erasure
Cooker Pan for 24-26			Extra		.....	Erebus
Nickelized Feet, per set			Extra		.....	Wrap

Note — Cooker pan fits inside the fuel ring and under the cover, has 8-inch lid in bottom, a deep cast iron pan for cooking and bakes like the old-fashioned Dutch oven.



Number	Length	Width	Body Height	Weight	Price	Code Word
121B	21 inches	16 inches	18 inches	54	\$.....	Erectable
26B	26 inches	18 inches	24 inches	66	.....	Erectile

Price includes Cast Base and Nickel Foot Rails.

Cooker Pan No. 121	.....	Extra	.....	Erasure
Cooker Pan No. 26	.....	Extra	.....	Erebus
Nickelized Feet and Base	.....	Extra	.....	Wrist



Number	Length	Width	Body Height	Weight	Price	Code Word
121C	21 inches	16 inches	18 inches	60	\$.....	Erection
26C	26 inches	18 inches	24 inches	73	.....	Erective

Price includes Cast Base, Nickel Foot Rails, Nickelized Top Ring.

Cooker Pan No. 121	.....	Extra	\$.....	Erasure
Cooker Pan No. 26	.....	Extra	.....	Erebus
Nickelized Feet and Base	.....	Extra	.....	Wrist



DESCRIPTION

Steel linings in all sizes, lined close to the top and reinforced with cast plate inside the draft opening, the cast elbow is made in one piece, the cast smoke collar and fuel ring are reinforced with cast ring inside the body. Swing top and draft damper are machine fitted.

Nickel urn, name plate and knobs on all sizes.

Length of stove is without front draft pipe.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company

Kenwood National

For Wood Only

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
221A	21 inches	16 inches	24 inches	85	\$.....	Eseulent
224A	24 inches	17 inches	24 inches	92	.....	Esoteric
226A	26 inches	18 inches	24 inches	98	.....	Espalier

Nickelated Swing Top, Name Plate and Turnkey.



Number	Length	Width	Body Height	Weight	Price	Code Word
221B	21 inches	16 inches	24 inches	97	\$.....	Espial
224B	24 inches	17 inches	24 inches	104	.....	Espousal
226B	26 inches	18 inches	24 inches	110	.....	Esquire

Nickelated Foot Rails, Swing Top, Name Plate and Turnkey.



Number	Length	Width	Body Height	Weight	Price	Code Word
221C	21 inches	16 inches	24 inches	103	\$.....	Essayist
224C	24 inches	17 inches	24 inches	111	.....	Essence
226C	26 inches	18 inches	24 inches	117	.....	Essential

Nickelated Top Ring, Foot Rails, Swing Top, Name Plate and Turnkey.



DESCRIPTION

A first quality Air Tight Heater with cast iron front, cast iron top and cast iron bottom, front feed door $10\frac{1}{4} \times 10\frac{1}{2}$ -inch opening. Sheet steel adjustable linings, 15 inches high. Wheel register draft opening and check draft in top.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Kenwood National

For Wood Only

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
21	21 inches	16 inches	24 inches	47	\$.....	Erectly
24	24 inches	17 inches	24 inches	49	.....	Erelong
26	26 inches	18 inches	24 inches	52	.....	Ergot

Nickelated Name Plate and Turnkey.



Number	Length	Width	Body Height	Weight	Price	Code Word
210	21 inches	16 inches	24 inches	51	\$.....	Ermine
240	24 inches	17 inches	24 inches	54	.....	Erode
260	26 inches	18 inches	24 inches	60	.....	Erosion

Nickelated Foot Rails, Name Plate and Turnkey.

Nickelated Top Ring, Foot Rails, Name Plate and Turnkey.

DESCRIPTION

A first quality Air Tight Heater with cast front feed door $10\frac{1}{4} \times 10\frac{1}{2}$ -inch opening. Steel adjustable linings 15 inches high; wheel register draft opening, check draft in top; large flat cooking surface on top.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company

Standard National

With Cast Top

For Wood Only—Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
218	18 inches	14 inches	15 inches	50	\$.....	Erudite
221	21 inches	16 inches	24 inches	62	.....	Eruption
226	26 inches	18 inches	24 inches	69	.....	Eruptive
232	32 inches	22 inches	24 inches	100	.....	Escalad

Nickelated urn, damper and turnkeys.

Drop ash door for removing ashes, adjustable linings, deflected tops.

No. 232 is extra strong, has six legs. Made for stores, halls, schools, etc.



Number	Length	Width	Body Height	Weight	Price	Code Word
318	18 inches	14 inches	15 inches	54	\$.....	Escolop
321	21 inches	16 inches	24 inches	66	.....	Escarp
326	26 inches	18 inches	24 inches	74	.....	Eschalon

Nickelated foot rails, urn, damper and turnkeys.



Number	Length	Width	Body Height	Weight	Price	Code Word
321R	21 inches	16 inches	24 inches	72	\$.....	Eschew
326R	26 inches	18 inches	24 inches	80	.....	Escort

Nickelated top ring, foot rails, damper, urn and turnkeys.



NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Standard National

For Wood Only

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
18	18 inches	14 inches	15 inches	24	\$.....	Endow
121	21 inches	16 inches	18 inches	32	.....	Enjoin
21	21 inches	16 inches	24 inches	34	.....	Endure
24	24 inches	17 inches	24 inches	37	.....	Enjoy
26	26 inches	18 inches	24 inches	40	.....	Endwise
32	32 inches	22 inches	24 inches	50	.....	Enema

Nickelated urn, damper and turnkeys.

Drop ash door for removing ashes, adjustable linings, deflected tops.

No. 18 has 3 legs only.

No. 32 is extra strong, has 6 legs. Made for stores, halls, schools etc.

Number	Length	Width	Body Height	Weight	Price	Code Word
210	21 inches	16 inches	24 inches	38	\$.....	Enemy
240	24 inches	17 inches	24 inches	41	.....	Ensample
260	26 inches	18 inches	24 inches	45	.....	Energetic

Nickelated foot rails, damper, urn and turnkeys.

Number	Length	Width	Body Height	Weight	Price	Code Word
210R	21 inches	16 inches	24 inches	44	\$.....	Energize
260R	26 inches	18 inches	24 inches	51	.....	Energy

Nickelated top ring, foot rails, damper, urn and turnkeys.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company

Special National

For Wood Only

Made of Blue Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
180	18 inches	14 inches	15 inches	19	\$.....	Enfilade
18	18 inches	14 inches	15 inches	20	.....	Effusive
121	21 inches	16 inches	18 inches	25	.....	Enlarge
21	21 inches	16 inches	24 inches	28	.....	Enforcer
24	24 inches	17 inches	24 inches	31	.....	Enlist
26	26 inches	18 inches	24 inches	34	.....	Engage
32	32 inches	22 inches	24 inches	47	.....	Engaging

Nickelated urn, damper and turnkey.

No. 180 has no lining. No. 180-18 has 3 legs only.

Six-inch front cap can be removed in taking out ashes.



Number	Length	Width	Body Height	Weight	Price	Code Word
1210	21 inches	16 inches	18 inches	29	\$.....	Enroot
210	21 inches	16 inches	24 inches	32	.....	Engender
240	24 inches	17 inches	24 inches	35	.....	Enrobe
260	26 inches	18 inches	24 inches	39	.....	Engine

Nickelated foot rails, damper, urn and turnkey.



Number	Length	Width	Body Height	Weight	Price	Code Word
210R	21 inches	16 inches	24 inches	38	\$.....	Engird
260R	26 inches	18 inches	24 inches	45	.....	English

Nickelated top ring, foot rails, damper, urn and turnkey.



NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Dixie National

For Wood Only

Made of Uniform Color Steel

Number	Length	Width	Body Height	Weight	Price	Code Word
180	18 inches	14 inches	15 inches	18	\$.....	Entreat
18	18 inches	14 inches	15 inches	19	.....	Entree
121	21 inches	16 inches	18 inches	24	.....	Entry
24	24 inches	17 inches	24 inches	29	.....	Entwine
26	26 inches	18 inches	24 inches	32	.....	Envelope

A good air-tight heater, with removable steel lining, in all sizes except the No. 180. Fuel cover made in one piece. Tops deflected to prevent warping. Screw draft damper, extra strong sheet steel legs, fastening into loops under the stove, nickel damper, urn and keys. No. 180-18 has 3 legs only.



Near Air-tight

For Wood Only

Made of Uniform Color Steel

Number	Diameter Body	Body Height	Weight	Price	Code Word
16	13 inches	15 inches	16	\$.....	Effluence

A round wood heater with 10-inch fuel opening in top and 6-inch pipe collar on rear, mounted on three steel legs, has nickel front damper and knob on cover. Has no lining.



NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



Steel Drum Oven

Number	Outside	Oven	Weight	Price	Code Word
14	18x14	18x10	17	\$.....	Warp

This entire oven is made of sheet steel. The collars and ends are swedged together, which makes it absolutely smoke and gas tight.

The weight does not exceed half of that of the cast end drum, and makes a corresponding saving in freight.

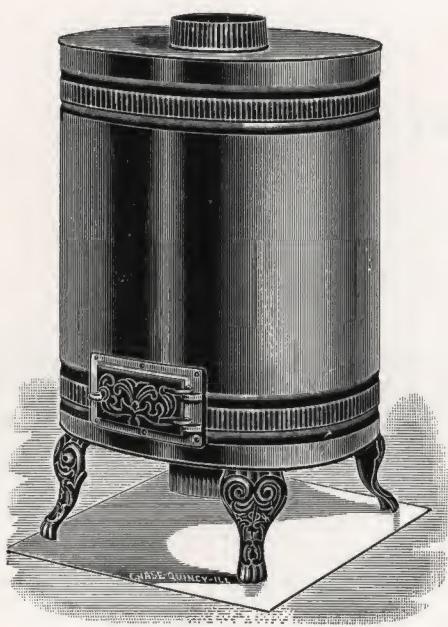


National Drum Oven

Number	Outside	Oven	Weight	Price Mounted	Code Word
18	18x14	18x11	34	\$.....	Warning
18	Castings and Rods only	20		.....	Warrant

Price includes cast plate to protect inside oven from fire. Note the inside oven space is one inch wider than any other oven drum on the market.

Neatest and best oven made. Can be attached to any stove pipe.



Dandy Drum

For Soft Coal, Hard Coal or Wood

Number	Size Pipe	Length Body	Height Body	Weight	Price	Code Word
21	6 in.	21 in.	24 in.	24	\$.....	Widely

Made of smooth steel with clean-out soot door in front and heat retainer inside. Each drum substantially crated.

NATIONAL QUALITY AND
EFFICIENCY

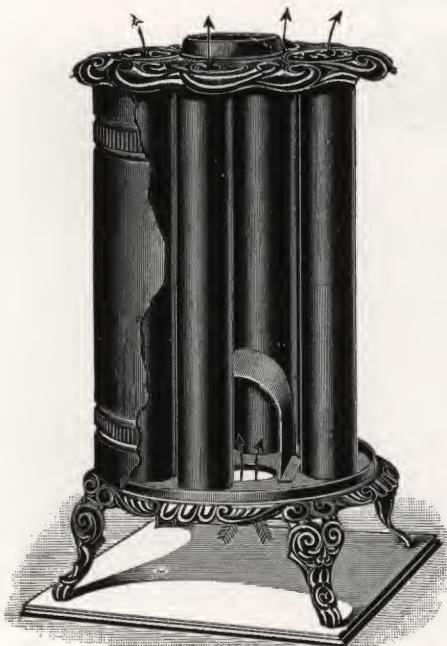
National Stoves, Ranges and Furnaces



Flue Drum

Blue Steel
With Cast-Iron Heads

Number	Length Inches	Size Pipe	Weight	Price	Code Word
28	28	6 inches	31	\$.....	Wafer
32	32	6 inches	34	.....	Waft
36	36	6 inches	54	.....	Wag
53	53	7 inches	77	.....	Wisdom



Excelsior Drum

For Soft Coal, Hard Coal or Wood

Number	Diam. Body	Size Pipe	Height Body	Weight	Price Mounted	Code Word
16	17 in.	6 in.	24 in.	57	\$.....	Wadd
17	17 in.	7 in.	24 in.	57	.....	Wadded
16	Castings and Rods only			45	.....	Wadding
17	Castings and Rods only			45	.....	Wallow

This drum is highly satisfactory for the use of soft coal, hard coal and wood. It has four ventiduct tubes $3\frac{1}{2}$ inches in diameter, which circulate the air from the floor through ducts and out of the top. A new and handsome pattern.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company



National Freight Car Heater

No.	Price	Code Word
28A With 4 joints pipe, 2 elbows, collar and wire.....	\$.....	Etching
28B Without pipe, etc.....	Eternize

Made of 27 gauge steel with folding legs and flat cooking top.
Size 17½ in. diameters, 28 in. long, 30 in. high. Weighs 30 pounds.
Feed door opening 9½ x 14½ in.
Screw damper with hot blast down draft.
Pipe, etc., packed inside of stove; each stove securely crated.
One in a crate.



K. D. Air-Tight Heaters

Made of Blue Steel—For Wood Only

Number	Length	Width	Height Body	Weight	Price	Code Word
18	18 inches	11 inches	13 inches	21	\$.....	Envoy
22	22 inches	13 inches	16½ inches	28	.....	Epact
24	24 inches	14 inches	16½ inches	30	.....	Epha
26	26 inches	15 inches	16½ inches	33	.....	Ephod

The illustration shows our knocked down air-tight heater placed upon the box in which it is packed for shipping. Saves space. The No. 24, packed in box, measures 5½x18x27 inches, and contains 2,673 cubic inches. Saves freight. Body is embossed blue steel with cast corners, cast legs and steel lining. Edges are made of slotted steel tubing, and slides over special folded ends, making strictly air-tight and ash-proof joints. Legs bolt on bottom; easily set up. Nickelized urn and damper.

NATIONAL QUALITY AND EFFICIENCY

National Stoves, Ranges and Furnaces



Sectional View

Excelsior Tank Heater

Number	Diameter	Height Body	Weight	Price	Code Word
2	12 inches	24 inches	135	\$.....	Witless
4	14 inches	24 inches	165	.....	Witling
6	24 inches	24 inches	195	.....	Wistful

Made of one piece cast iron body, with cast grate, cast ash pan and cover. Galvanized iron smoke pipe with damper and cap.

Require no fastenings in tank, sinks of its own weight. The cast cover swings to admit draft in the tube, and closes thoroughly tight; will hold fire perfectly. Burns chips, cobs, wood or coal. Guaranteed not to leak.



National Radiator

For Hard Coal, Soft Coal or Wood

Number	Size Body	Size Pipe	No. Tubes	Weight	Price	Code Word
63	12 x26 inches	6 inches	5	17	\$.....	Warworn
64	13½x28 inches	6 inches	6	22	.....	Wassail
74	13½x28 inches	7 inches	6	22	.....	Wasteful

Made of all sheet steel with ventiduct tubes, which circulates the air of the room continually. The deflector plates maintain the products of combustion around the tubes and against the interior of the body. Can be attached directly to a stove collar or to the stovepipe in room above.

NATIONAL QUALITY AND EFFICIENCY



Excelsior Stove & Manufacturing Company

National Feed Cookers



Cooking feed for stock pays the stock raiser well in dollars and cents; and the NATIONAL Feed Cooker is one of the best on the market. It is carefully made, of best quality material, and furnished in seven different sizes.

Jacket is made of heavy steel, carefully constructed, and neatly painted. We fit a heavy **angle iron** around the bottom of the jacket, instead of the flat band used by others. The angle is much better than a flat band, for the angle keeps the cooker from settling down into the earth when in use; and we call particular attention to this very important point of superiority of our cooker. The handles are **malleable** iron, and very strong.

Kettle is made of No. 1 pig iron, guaranteed not to fire crack; and carefully tested before being shipped.

Either wood or coal can be used for fuel, separate grate for coal being furnished when so ordered; no grate is required when fuel is wood.

Size No.	Actual Capacity Gallons	Diameter Kettle Across Top	Depth of Kettle	Weight Complete Cooker	Price Cooker and Kettle	Coal Grates Extra
1	15	24 in.	13½ in.	100 lbs.	\$.....	\$.....
3	30	30 in.	16 in.	175 lbs.	.....	.....
4	45	34 in.	18½ in.	200 lbs.	.....	.....
5	55	36 in.	21 in.	225 lbs.	.....	.....
6	65	38½ in.	21 in.	300 lbs.	.....	.....
7	75	41 in.	22 in.	325 lbs.	.....	.....

Pipe elbow and damper, per set extra, \$.....



When Ordering Separate Jackets for feed cookers measure the kettle around the **outside**, about one inch from top, where you wish jacket to fit it. Measure **under** the kettle flange.



National Butchers' Stove

No.	45	60
Capacity .....Gallons	45 "	60
Price, for Wood .....Each	\$.....	\$.....
Price, for Wood and Coal .....Each	.....	.....

The NATIONAL Butcher Stove makes a good boiler for cooking feed or heating water; can also be used for rendering lard. Furnace is made with a steel drum, which is strong and durable. Kettles are made from No. 1 pig iron, and carefully tested before being shipped. Regularly furnished for wood; coal fixtures are extra.



Changes
Winter to
Summer
Temperature
in the Entire
Home

NATIONAL
WARM-AIR
FURNACES



Excelsior Stove & Manufacturing Company

A Brief Treatise on Warm Air Furnaces

By J. D. G. Anderhill

Furnaces — To the average person a Furnace has the appearance of being a complex apparatus, made up of a labyrinth of pipes and internal mechanism which requires a master mechanic and the knowledge of an expert heating engineer to install, besides extraordinary intelligence to operate.

This is not compatible with the facts. A Furnace is simply a stove located in the cellar with casings around it designed to trap the radiation from the heater so that by the addition of a cold air supply to the casing, the heated air may be driven from the casing into the several rooms of a residence through the pipes at the top of the casing, thereby making it possible with one fire or apparatus to heat the entire house from a central point.

It is therefore logical that the efficiency of the apparatus will be strictly in accordance with the qualifications of the apparatus as a heat generator, and the proper relations of the piping to transmit the heat to the places desired. There are absolute laws that govern these functions which, although very simple, must be closely followed to obtain the required results.

Natural Heat — Is obtained from an open fire by the direct rays passing through the air. Direct heat rays do not heat the air; they heat the objects. An open fire-place is a good example; it warms the objects which are in line with the heat rays. A man standing before the open fire is warmed in front, while his back remains cold, because the air in the room is cold and his back is exposed to the cold air. Again, the sun heats the earth and objects by direct rays; therefore, a person in the shade not exposed to the rays of the sun, feels the air blow cool, although it has been exposed to the sun constantly.

Artificial Heat — From a fire that is burned within an enclosure is obtained by Radiation and Convection. The heat is transmitted from the fire to the air which in turn heats the objects. Therefore, the radiant-heat is conducted to the air through the exposed surface of the apparatus, the volume of which will be the exact equivalent of the exposed radiating surface. This is exemplified by the multiplicity of flanges on the body of air cooled cylinders in automobiles, that have the efficiency to radiate the heat from a continuous fire, and the friction heat of the piston inside the cylinder to effectually prevent overheating.

Combustion — Perfect combustion consists in the complete consumption of the Hydro-carbons (gas) and the Fixed-carbon (coke) being the component parts of the fuel that measures its value for heat efficiency. An analysis of an ordinary grade of Bituminous coal consists of thirty-five per cent Hydro-carbons, fifty-seven per cent Fixed-carbon and eight per cent ash. The Fixed-carbon burned within the fire pot of the Furnace supplies its quota of heat. The Hydro-carbons are volatile, they are driven out of the coal by the heat from the fire, and escape unburned out of the chimney, unless they are made combustible. This can be done through a proper mixing with heated air in the presence of a fire, which will ignite the mixture and burns with an incandescent flame.

(Welsbach with his gas mantle produces perfect combustion of gas, through a mixture of air, gas and fire, while confined within the limits of the mantle, thereby greatly increasing the illuminating efficiency, also completely consuming the smoke product.)

The consumption of the Hydro-carbons adds its quota of heat to that of the Fixed-carbon and largely eliminates the black smoke and soot which is an indication that combustion is imperfect.

Humidity — Generally speaking, Furnace manufacturers have seriously neglected to provide their apparatuses with a satisfactory means of supplying the necessary humidity to the air for living rooms. While it is true that a water-pan is usually found in the Furnace casing somewhere, it is generally placed opposite the ash-pit where it does not evaporate more than twenty-five per cent of moisture.

The amount of moisture or water vapor contained in the atmosphere means the number of grains of vapor per cubic foot of air. The Dew point is the point at which saturation is complete, when the air can no longer retain the vapor, it is deposited in the form of dew.

When the air contains eighty-five per cent of water vapor we consider it damp, at sixty-five per cent moderately dry, fifty per cent is dry, thirty-five per cent very dry, twenty-five per cent is considered extremely dry.

If we can realize that the average outdoor humidity is sixty-five per cent and our homes during the winter months contain not more than twenty-five per cent moisture, we can easily account for the shortage through these manifestations. Colds, chapped and rough skin, dry throat and nostrils, the furniture falls apart, piano gets out of tune, the flooring presents unsightly cracks, plants and flowers wither and die, we feel uncomfortable unless the thermometer registers 75 or 80. Cold cream and cough drops become a daily necessity. All these ills and discomforts are traceable to a lack of necessary moisture in the air.

National Stoves, Ranges and Furnaces



The average home requires an evaporation of from 15 to 20 quarts of water every twenty-four hours to maintain the necessary humidity. To accomplish this result requires that the evaporating pan be placed in proximity to the firepot section of the furnace, which is the hottest portion of the apparatus.

It should not be located in such position in the casing which permits the cold air to surround it, since in such location it is impossible to obtain the necessary heat to evaporate a sufficient quantity of water.

The pan should be located directly over the ash-pit and under the feed opening at which place there is always sufficient space for the admission of the water-pan. This position is obscured from the cold air flow through the casing. Moreover, it occupies otherwise waste space. With such arrangement it is possible to evaporate large quantities of water.

Herein lies the great advantage of Warm Air Furnace heating system over that of Steam or Hot Water heaters. Steam heating plants have no means of evaporation without placing water-pans on the radiators, which are inadequate for the purpose. Hot Water Heating systems do not provide for evaporation into the rooms, the water being confined inside the radiators. Location of the evaporating pan in Warm Air Furnaces is very important and should have careful consideration by Furnace Manufacturers and Dealers.

Installation of Warm Air Furnaces — Requires that the craftsman should be able to calculate the volume of warm air necessary to heat a given space, and the size apparatus most suitable without depending upon the capacity rating listed by the various manufacturers of Furnaces, which are not always reliable.

It is not sufficient to use the "rule of thumb," that specifies a furnace with a twenty-four inch firepot to heat an eight-room residence, regardless as to the conditions of size, exposure, thickness of walls, locality, etc.

Many furnaces on the market, and frequently those of reputable manufacturers, are "air-bound," consequently are much over-rated in capacity. Therefore it occurs that Furnaces are installed with a number of warm air pipes leading from the casing, greatly in excess of the furnace ability to deliver a volume of warm air to fill all the pipes, with the result that one or more of the pipes are "starved," causing a cold air return from some of the rooms through the warm air pipes. This condition is met by the mechanic with futile attempt to cap or trap some warm air from the casing to these particular rooms, or the replacing of an obstinate pipe with one of a larger size. Failure to get results from these efforts as a last resort, excess firing at great expense of fuel and over heating the cellar ends in utter failure.

It is not consistent to assume that sixty per cent of the space inside the casing is occupied by the Furnace, and that the remaining forty per cent less the friction loss is available for warm air current, which is a rule of custom and approved by many furnace manufacturers. The available warm air supply within the casing which may be taken off should be based on the B. T. U., determined from the area of the grate surface, and may be calculated on the basis that: One inch of grate surface will supply $1\frac{1}{2}$ inch of warm air pipe area, assuming that the casing contains one-sixth more area than the combined area of all the warm air pipes, this rule will be found to meet the requirements.

Size Furnace — The required size Furnace for a specific installation can be estimated only after finding the total area of all warm air pipe outlets. This is found after calculating the size of each pipe for the particular rooms or spaces. The rule is as follows:—

Find the exposed wall surface, then deduct the glass surface and divide by the thickness of the wall (in no case less than 10 inches). Next add the glass surface and multiply by 75 (because one foot of glass surface cools 75 cubic feet of air per hour). Add to these figures the cubic contents of the room and multiply by .013; results are area in square inches for warm air pipe. Twenty-five per cent less than these figures if for second floor rooms.

Outside doors are reckoned as equivalent to one-half their area in glass.

Another method of determining the size warm air pipe required for a given size room is to reduce the whole to Equivalent Glass Surface (E. G. S.). This is found by measuring the outside walls of the room and multiply by the height of the ceiling. The wall surface is determined after deducting the glass surface exposed in the windows. The equivalent glass surface is found by dividing the wall surface after deducting the glass surface by four, then add the result to the glass surface. Dividing this by the cross-sectional area of the pipe gives the ratio of pipe area to E. G. S.

Ordinarily 1 to $1\frac{1}{2}$ square inches of pipe area to 1 square foot of E. G. S. is a reasonable basis for rooms on first floor. One square inch of pipe area to $1\frac{1}{2}$ feet of E. G. S. for second floor rooms. For churches, stores, etc., four-fifths of the above will suffice.

These calculations are based on zero weather and warm air pipes not to exceed 15 feet in length. These conditions should have an allowance of one per cent for each degree above or below zero.



Excelsior Stove & Manufacturing Company

Cold Air Supply — The cold air supply in warm air Furnace work is very important. Cold air is the motive power that supplies the warm air to the rooms. The cold air forces the warm air out of the furnace casing into the warm air pipes located at the top of the Furnace. Without a proper push of cold air, there will be an improper amount of warm air out of the registers, regardless of the amount of fire in the Furnace. Merely burning coal does not represent the volume of warm air obtainable from the register, therefore the necessity for proper size and other conditions in the cold air duct.

Cold air supply taken from outside should be of a size equal to three-fourths of the area of all the warm air pipes; cold air when heated expands and increases in volume by one-fourth.

Combination cold air supply from outside and inside is a practical installation if arranged with a damper so that the air may be taken from outside exclusively through the day, then reversed to take the supply during the night from inside.

An ideal system for combination cold air supply from out and inside, in which both act simultaneously, may be constructed by the use of the Furnace Pit. The pit should be the full diameter of the casing; the required depth to be found after computing the area of both cold air ducts. In all cases it should be as shallow as possible. The pit to be provided with a brick pier to support the Furnace, also a 2-inch wide brick partition, extending up to the Furnace bottom which divides the pit into two compartments. The outside air to be connected to one of the compartments while the inside air should be led to the other. The outside air duct should be provided with a slide damper for adjustment during stormy weather. The sizes for cold air ducts with this system must be sixty per cent inside air, and forty per cent outside air, based on full area of all warm air outlets.

Cold air supply exclusively from the inside should equal in area all the warm air pipes. Inside air after the rooms are warmed has expanded nearly one hundred per cent, therefore the necessity to equalize the volume. The cold air register face should be placed in the hall or living room. It may be placed in the floor, using hardwood register face for the purpose. These are obtainable in various shapes and may be placed in the face of the hall seat or in the side wall of the stairs where the register will make a neat trimming. Ample opening must be allowed to permit the required flow of cold air.

Cold Air Duct — Modern practice of supplying the Furnace with cold air taken from the hall or living room of a residence is commendable, it is self-regulating and not affected by weather conditions. I realize that many people contend that the inside air becomes vitiated. This would be true if our homes were built air-tight. Facts are that the air leakage through the door and window frames usually is quite sufficient to supply the Furnace and occupants of a home with the necessary fresh air. A single gas jet burning in a room has the effect of vitiating more air per hour than the exhalation of twenty persons. From this it may be judged that there is an expression of needless alarm about the foul air present in our homes.

Cold Air Room — When outside air is used exclusively for cold air supply, it is always best to build a separate cold air room. This room should have an area at least three times that of all warm air pipes; it should be connected to a cellar window with a wire screen over the outside to prevent debris blowing into the cold air room. The window must have an area greater than the warm air pipes. Connection from the cold air room should enter a pit under the Furnace. This room acts as a reservoir for the cold air, and will not be affected easily by every change of wind. The duct connecting the cold air room to the Furnace pit requires a damper which will serve to regulate the quantity of air admitted to the Furnace. The cold air room should be built as nearly air-tight as possible; dressed flooring lumber with joints made up close, or galvanized sheet metal, will serve the purpose. The cold air pit and underground duct should be built of cement, or brick laid in cement mortar. Tee-iron covering bars, to support the brick top over the cold air trench with well cemented joints makes a permanent covering, and may be filled over with earth.

Cold Air Pit — In former years it was a universal custom for Furnace men to excavate a "pit" or well hole under the furnace, the pit was made circular in form and of a size to fit the base ring of the Furnace. The cold air supply entered this pit and distributed the air equally to all the open space between the ash pit, bottom and casing. Recent practice, on account of less cost, has prompted the men who install Furnaces to admit the cold air into the casing above the base ring, preferably in the rear of the Furnace, using for the purpose a "cold air shoe" made of galvanized sheet metal.

This change in the conditions has led to new difficulties. Many Furnaces, built without regard to where the cold air duct would be attached, are found to be improperly proportioned, a faulty construction on account of the ash pit being too close to the casing, causing eddies, or a whirling motion of the cold air at the entrance, thereby seriously interfering with the proper volume finding its way into the casing. Although the cold air inlet through the casing may indicate a capacity equal to all the requirements, still the Furnace is at best a partial failure, and consumes unnecessarily large quantities of fuel, to compensate for a shortage of air, by overheating the air that is present.

The distance from the ash pit to the casing should equal one-sixtieth of the area of the cold air supply. This rule is based on Furnaces with the rear of ash pit circular in form. This is one of the most important features in Furnace construction and should be carefully considered by Furnace manufacturers and dealers.

National Stoves, Ranges and Furnaces



Furnace Casings — Should be made double; a single casing lined with asbestos sheathing does not sufficiently retard the heat from the cellar. The addition of corrugated tin or iron riveted against the inside casing is an improvement; however, it lays too close to the casing to effectually retard the heat. The best form for Furnace casings consists of an outer casing made of galvanized iron with an inner lining supported not less than three-quarters of an inch from the outer casing. This method provides a clear space between the two easings for the circulation of the air upward to the bonnet; the supply originating from the cold air duet, thoroughly prevents radiation into the cellar from the casing. The inner lining should be made of a thin black iron (which has an affinity for heat), being of light weight it discharges readily the heat absorbed from the furnace; the dimensions of this black iron lining in the average size furnace equals 50 square feet of hot metal for the cold air to impinge upon during its passage through the casing, therefore it has an efficiency too valuable to be omitted.

Location of Furnace — The Furnace should be placed as nearly central as possible to the registers thereby making all warm air pipes of nearly equal lengths, with the shortest pipes toward the north and west on account of the prevailing winter winds from those directions. Generally speaking, it is impossible to force the warm air against the cold winds, therefore the necessity to favor those pipes leading north or west.

If the cellar is too shallow, the Furnace should be set below the cellar floor sufficient to give the warm air pipes an upward slope of at least one inch to each foot.

Warm Air Pipes — These should be made of bright tin, all joints to be fitted as nearly air-tight as possible. All warm air pipes should be taken from the side of the Furnace bonnet as near to the top as possible, and all on a uniform level at the top. Asbestos paper covering over the warm air pipes will minimize the radiation into the cellar; it is most conveniently attached with paste, using wall paper paste for the purpose.

Wall pipes for second floor rooms should have half the capacity of the leader pipe from the furnace, since these are placed vertical they have a "pull" which promotes circulation; therefore, leader pipes to second floor rooms may be smaller and longer than those for first floor. Each warm air pipe should be provided with a solid damper set near to the Furnace and fit close inside the pipe. These dampers serve to distribute the warm air flow to the various rooms in quantities to suit the requirements, they also provide means for totally closing off any apartment desired.

There is no merit in the use of trunk pipe service, namely one or two main leader pipes with branches radiating off to the various rooms, however, with the use of the Double Wall Pipes and Base Board Registers, it is practical to use one leader pipe to serve an upper and lower room.

Size of Registers — The designated sizes of registers, while indicating the size opening, refers to the space occupied through the floor, it does not indicate air space available. The fret work constituting the face of the register is an obstruction equal to one-half of the listed size; therefore, this must be taken into account when estimating the size register required for a given size warm air pipe.

Location of Registers — The general public seems to be of the opinion that the register should be located in a room at the place they desire to be kept warmest. The contrary of this opinion is true.

Warm air from the register does not fill the room from the floor to the ceiling. It rises, or more properly speaking it is pushed with force, out of the register by the cold air and continues in a straight column upward to the ceiling; it is then deflected toward the opposite wall, when it descends to the floor line and returns toward the starting point; therefore, the room is filled with warm air from the ceiling downward. The warm air circulation is continuous since the exposed wall and glass surfaces cools the air. From this it will be seen that the coldest place in a room will always be that point next to the register. Consequently the registers should be placed away from all outside walls and windows and as near to the Furnace as possible.

The first law of heat transmission is, to get the warm air into the room as quickly as possible.

Side wall registers on first and second floors are not objectionable if proper sizes are used.

Chimney Flues — A good chimney flue is required to operate any kind of Furnace. These should be built of brick, or brick and tile lining with opening inside 8x12 inches. For small houses an 8x8 flue is sufficient, since the heating apparatus will necessarily be of a small size. The chimney should extend above the highest point of the roof to prevent down-drafts.

When building chimneys with fire-clay tiling, a 4-inch brick wall around the tiling will meet the requirements for fire-proofing. Chimney should begin at the extreme bottom of foundation and be provided with a soot drawer for convenience in removing the ashes. The Furnace should have a separate flue with no stoves or openings into the same flue.



Excelsior Stove & Manufacturing Company

Detail of Various Methods of Cold Air Supply for Warm Air Furnaces

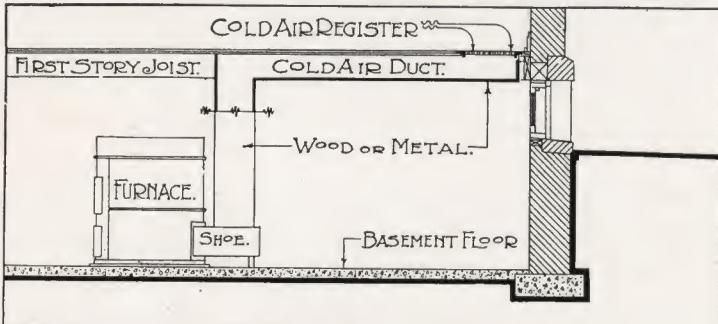


Fig. 1. Inside Air Supply

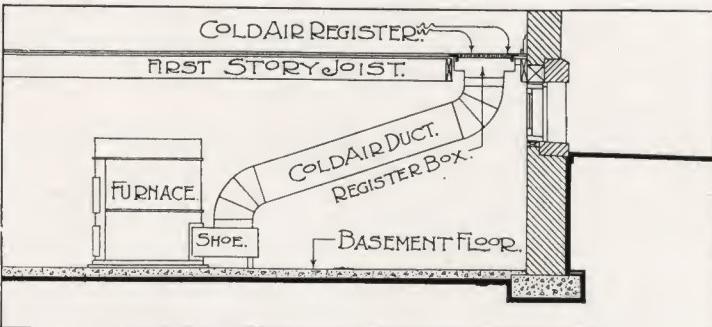


Fig. 2. Inside Air Supply

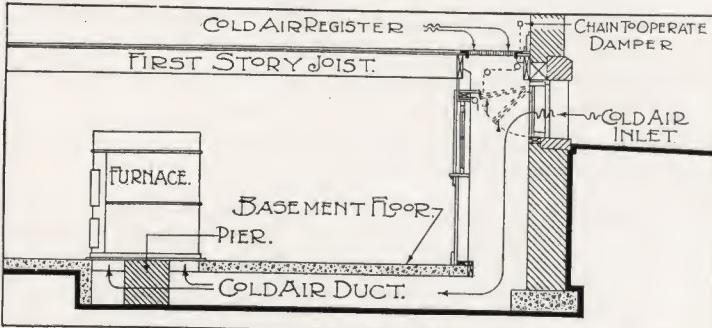


Fig. 3. Inside and Outside Air Supply

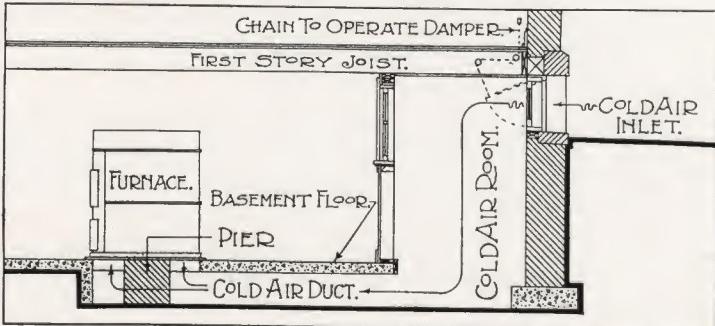


Fig. 4. The Cold Air Room

This method is available, where the joists run in the direction required for the cold air duct. Wood flooring boards, or galvanized iron nailed under the joists, form the duct. A round pipe connects the duct to the cold air shoe.

This is a popular method of cold air duct. A regular galvanized register box may be used in the floor, if the register box is too large to go between two joists then slots may be cut in the box to straddle the joist.

This underground cold air supply has its inlet through a cellar window. Note the window in the cold air duct to admit natural light into the furnace room. The pier under the Furnace should be made of brick or concrete and strong enough to support the furnace.

This arrangement of cold air supply is same as Fig. 3, excepting vertical portion is a cold air room, and may be arranged for inside air in addition to the outside air. Basement floor covering for cold air duct should be hard brick laid onto iron covering bars and all joints thoroughly filled with mortar.

National Stoves, Ranges and Furnaces



Circumference and Area of Circle

Diam. Inches	Circumference	Area	Diam. Inches	Circumference	Area	Diam. Inches	Circumference	Area
1	3.141	.7854	14½	45.55	165.13	28	87.96	615.75
1½	4.712	1.767	15	47.12	176.71	28½	89.53	637.94
2	6.283	3.141	15½	48.69	188.69	29	91.10	660.52
2½	7.854	4.908	16	50.26	201.06	29½	92.97	683.49
3	9.424	7.068	16½	51.83	213.82	30	94.24	706.86
3½	10.99	9.621	17	53.40	226.98	30½	95.81	730.61
4	12.56	12.566	17½	54.97	240.52	31	97.38	754.76
4½	14.13	15.904	18	56.54	254.46	31½	98.96	779.31
5	15.70	19.635	18½	58.11	268.80	32	100.5	804.24
5½	17.27	23.758	19	59.69	283.52	32½	102.1	829.57
6	18.84	28.274	19½	61.26	298.64	33	103.6	855.30
6½	20.42	33.183	20	62.83	314.16	33½	105.2	881.41
7	21.99	38.484	20½	64.40	330.06	34	106.8	907.92
7½	23.56	44.178	21	65.97	346.36	34½	108.3	934.82
8	25.13	50.265	21½	67.54	363.05	35	109.9	962.11
8½	26.70	56.745	22	69.11	380.13	35½	111.5	989.80
9	28.27	63.617	22½	70.68	397.60	36	113.0	1017.8
9½	29.84	70.882	23	72.25	415.47	36½	114.6	1049.3
10	31.41	78.539	23½	73.82	433.73	37	116.2	1075.2
10½	32.98	86.590	24	75.39	452.39	37½	117.8	1104.4
11	34.55	95.033	24½	76.96	471.43	38	119.3	1134.1
11½	36.12	103.86	25	78.54	490.87	38½	120.9	1164.1
12	37.69	113.09	25½	80.10	510.70	39	122.5	1194.5
12½	39.27	122.71	26	81.68	530.93	39½	124.0	1225.4
13	40.84	132.73	26½	83.25	551.54	40	125.6	1256.6
13½	42.41	143.13	27	84.82	572.55			
14	43.98	153.93	27½	86.39	593.95			

To find the area of a circle multiply the square of the diameter by .7854.

To find the circumference of a circle when the diameter is given, multiply the given diameter by 3.1416.

To find the diameter of a circle when circumference is given, multiply the given circumference by .31831.

Sizes and Area of Round Pipes

Velocity of Air discharged in cubic feet per minute at various elevation of the Pipes

Size of Pipe Diameter Inches	Area in Square Inches	Elevation of Pipe 1 inch to a foot discharges 100 foot per minute	Elevation of Pipe 12 inches to a foot discharges 150 foot per minute	Elevation of Vertical Pipe discharges 300 foot per minute
7	38.4	26.7	40	80.
8	50.2	34.9	52.3	104.6
9	63.6	44.1	66.1	132.2
10	78.5	54.5	81.7	163.4
12	113.	78.5	117.7	235.4
14	153.9	106.9	160.3	320.6
16	201.	139.6	209.4	418.8
18	254.4	176.7	265.	530.
20	314.1	218.1	327.1	654.2
22	380.1	263.9	395.8	791.6
24	452.3	314.1	471.1	942.2
26	530.9	368.7	553.	1106.
28	615.7	427.6	641.4	1282.8
30	706.8	490.8	736.2	1472.4
32	804.2	558.5	837.7	1675.4
34	907.9	630.5	945.7	1891.4
36	1017.	706.8	1060.2	2120.4
38	1134.1	787.5	1181.2	2362.4
40	1256.6	872.6	1308.9	2617.8
42	1385.4	962.1	1443.1	2886.2
44	1520.5	1055.4	1583.1	3166.2
46	1661.9	1154.1	1731.1	3462.2
48	1809.6	1256.6	1889.9	3769.8
50	1963.5	1363.4	2045.1	4090.2

The volume of air in cubic feet per minute discharged by a flue equals the velocity in feet per minute multiplied by the area in square feet.

Rule—To find the length time required to fill a room with warm air. Find the cubic contents of the room and divide by figures in above table; result is time in minutes.

Example—Room 16x16x9 feet, equals 2304 cubic feet, divided by 78.5 (which is a 10 inch pipe with elevation 1 inch to a foot) equals 29.35 minutes.



Excelsior Stove & Manufacturing Company



Open Front View

Approved by

A SERIES

Cycloidal National Furnace

For Soft Coal, Coke or Wood

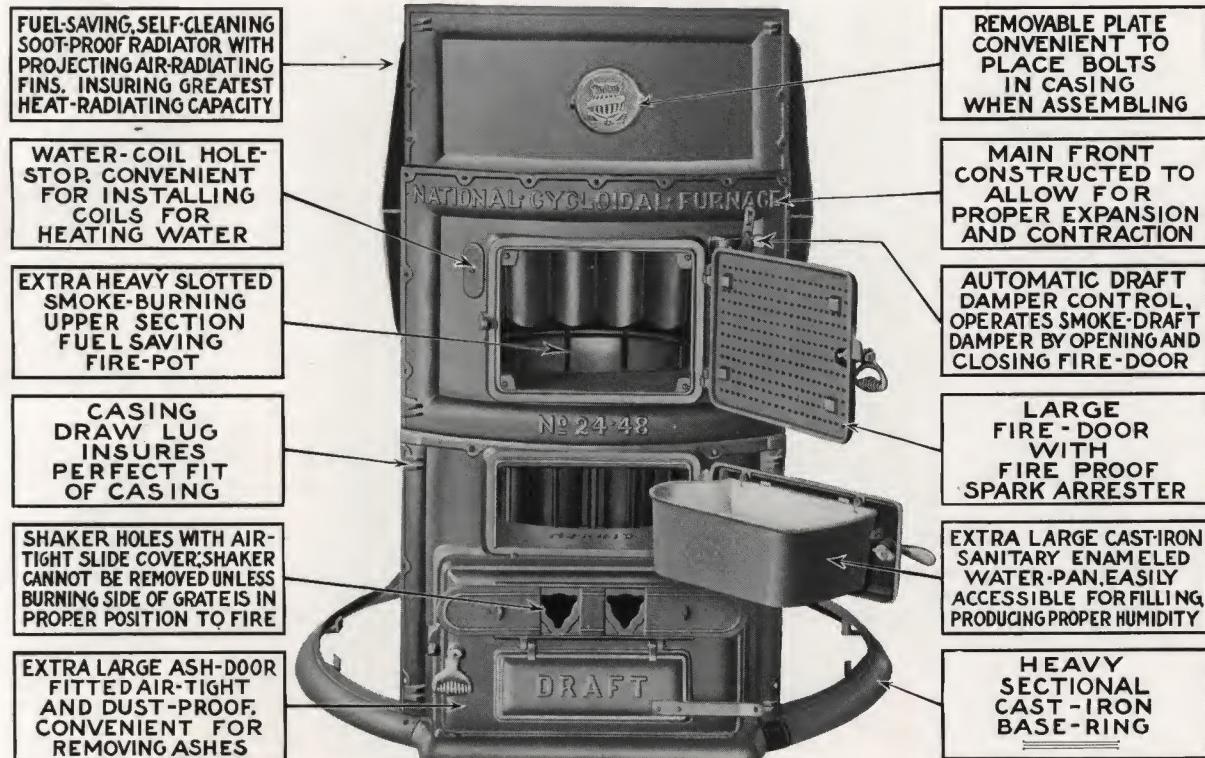
Note the Porcelain Enamelled Water pan, removable for cleaning, Grate shaker openings and slotted Fire Pot. A self cleaning Furnace, with the largest active radiating surface. It burns the smoke.

Description, Pages 193-201 — Detail, Page 196

NATIONAL FURNACES ARE GREAT FUEL SAVERS



National Stoves, Ranges and Furnaces



Cycloidal National Furnace

For Soft Coal, Coke or Wood

Easily sold because the prospective buyer can appreciate its superior qualities.



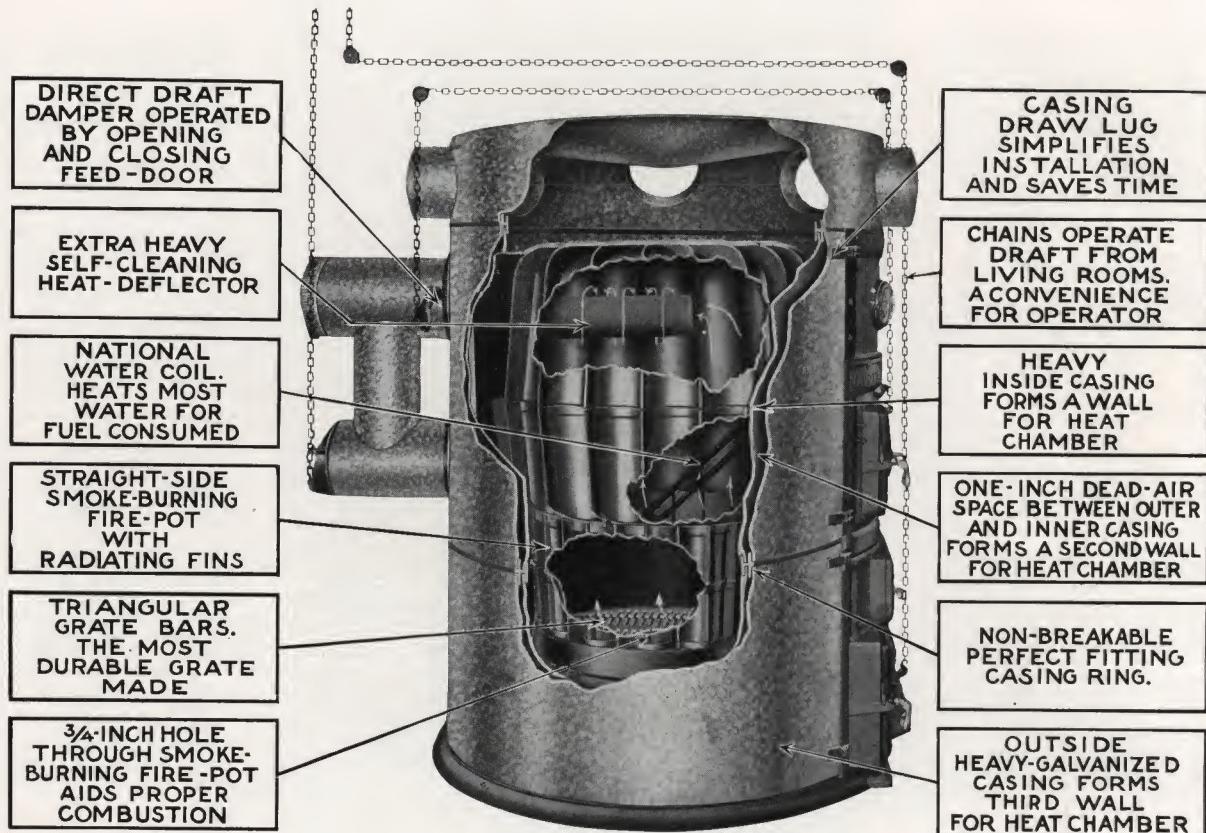
• TRADE MARK •

Secure the Agency

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Sectional View with Casing

Approved by

A SERIES

Cycloidal National Pipe Furnace

For Soft Coal, Coke or Wood



Cycloidal NATIONAL Furnaces have many exclusive features not found in other makes. Economy, convenience and satisfaction for the user.

Also made in One Register style.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Cross Sectional View

Approved by



Cycloidal National Furnace

For Soft Coal, Coke or Wood

All Cycloidal NATIONAL Furnaces are made of analyzed Gray Iron, the most durable fire resisting metal known. Every Furnace is properly fitted and assembled before leaving the Factory.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

A SERIES

Cycloidal National Furnace

For Soft Coal, Coke or Wood

	21-44A	24-48A	27-51A
Number of Furnace			
Diameter Top of Fire Pot	Inches 21	24	27
Depth of Fire Pot to Grate	Inches 13½	14½	16
Diameter of Combustion Chamber inside	Inches 25½	28¾	32
Diameter of Combustion Chamber outside over all	Inches 34	37	40
Diameter of Casing	Inches 44	48	51
Height Lower Casing	Inches 22	24	26
Height Upper Casing	Inches 30	32	33
Height of Castings	Inches 51½	55½	61
Height with 15-inch Bonnet	Inches 67	71	75
Size Feed Door opening	Inches 9½x14	10½x14	10½x14
Size Ash Door opening	Inches 11x18¾	11¾x21	13½x24
Size Smoke Collar	Inches 9	9	9
Size Water Coil Pipe for Range Boiler	Inches 1	1	1
Size Evaporating Pan	Quarts 8	8	8
Area Grate Surface	Square inches 314	418	551
Area Radiating Surface	Square feet 45.64	57.04	71.3
Amount of warm air area that may be used	Square inches 522	708	907
Warm Air Area within the Casing	Square inches 699	843	1005
Heating Capacity	In 1,000 cubic feet 22-30	30-40	40-50
Shipping Weight, Furnace without Casing	Pounds 1425	1640	1925
Shipping Weight, Furnace, with Casing	Pounds 1590	1830	2150
Price, Furnace without Casing	Each \$	\$	\$
*Price, Double Casing with 15-inch Straight Side Bonnet	Each \$	\$	\$

For Extra Bonnet height add per inch all sizes extra.

Can be furnished with Wood burning grate if desired.

We can furnish a special Fire Pot for the use of Hard Coal.

NOTE — Casing Rings, 24 yards Chain, 15 pounds asbestos cement and six Pulleys included in above Furnace prices.

Double Tee Joints, see Page 240.

Water coil, see Page 243.

Repairs

To facilitate ordering repair parts, or parts broken in transit, the Cycloidal NATIONAL Furnace is made with every piece of casting having a special number cast integral, which indicates that particular casting and no other. Therefore, dealers will please order parts wanted, using these special numbers, which obviates the necessity of a lengthy description.

Cycloidal National Furnaces

Have the individuality that make them more desirable than all others. Note the increased Radiating surface and Self-cleaning feature of the Cycloidal NATIONAL Furnace.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Cycloidal National Furnace

The combustion of soft coal in the Cycloidal NATIONAL Furnace is as nearly perfect as is possible to obtain. Air, the element that produces combustion, is supplied to the fire at the bottom and top; it mixes with the escaping gases making them combustible. The large combustion chamber above the fire pot is expanding space for the mixture in which the air and gases are burned with an incandescent flame, thereby completely eliminating the black smoke and soot, which is the manifestation of imperfect combustion.

The Hypocycloidal shape of our Cycloidal NATIONAL Furnace, with its broad tangent flanges, presents immense surface for the air to impinge upon, it multiplies the radiating efficiency three times that of a flat surface, consequently it produces three times the heating power of ordinary furnaces.

Compare the exposed radiating surface of the Cycloidal NATIONAL Furnace with that of any other furnace on the market.



Hot Blast Fire Pot

Thirty-five per cent of the heat value of soft coal consists of gases. Our construction of two piece Tubular fire pot with the self-sealing joint distributes a hot blast air at the top, causing the combustion of the fuel at the top instead of the center of the fire. This increases the radiating power of the fire pot and prevents the accumulation of ashes around the edges of the fire pot which retards radiation.

The fire pot is made in two parts; the expansion cup joint in the center prevents it from cracking. It is provided with fins on the outside that draw away any excessive heat and add materially to its radiating power. It is made exceptionally heavy; with the additional strength of the vertical flanges it will withstand the periodical severe heat produced from soft coal.

Note that the lower half of the pot has tubular openings the upper half slots, the air passing through the tubes becomes super-heated and enters the fire through the slots at the top of the fire only.

We can furnish a special Fire Pot for the use of Hard Coal

Gas Burning Fire Pot



We furnish this Special Fire Pot for burning coal and natural gas which may be used in our Cycloidal NATIONAL Furnace. The lower section of the pot is a cored casting with two 1½ inch gas inlets. The gas orifices are under the arch to prevent coal ashes from entering the gas belt. This fire pot permits using coal or gas, at the same time, or separately, as desired. Best results are obtained with gas if artificial fuel is used.

No. 21-44	Gas pot, Extra.....	Price \$
No. 24-48	Gas pot, Extra.....	Price
No. 27-51	Gas pot, Extra.....	Price

NOTE — 2 Needle point valves, Air Mixers and 14-inch pipe Nipples included.
These prices are for the Gas Pot when furnished instead of the regular Coal Pot.



Grates

The grate in our Cycloidal NATIONAL Furnace is the approved triangular revolving bar type. It is geared into pairs, so that half the fire may be cleaned at a time, making it convenient for the operator. The bars are mounted independently. For renewal they may be removed one at a time. No grate frame is used, therefore it saves repairing and is decidedly easy to manipulate. An ingenious construction prevents the operator from removing the grate shaker without leaving all grate bars in their proper relation to the fire.

Ash Pit

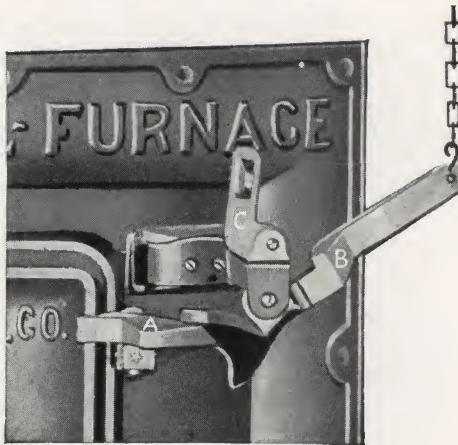
The ash pit section is made in one piece nearly to the top; it is air and ash tight; there can be no leakage of ashes on the bottom into the casing where it finds its way into the rooms above. The bottom of the ash pit is flat; it has no projections that would prevent it from setting level. We recommend a layer of brick to be placed under the Furnace to guard against damp earth.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

Automatic Damper



The direct draft damper is designed to remain closed at all times, unless locked in an open position with the automatic device which operates in conjunction with the feed door. The direct draft damper must be chained to the automatic device so that when the feed door is opened for replenishing the fire, it will automatically open the damper; thereby preventing smoke or gases escaping into the cellar. This insures the fire control as desired by the operator.

Reversible Flue

The reversible flue on the Cycloidal NATIONAL Furnace is provided with a direct draft damper which is operated automatically with the feed door. The check damper at the base of flue retards the draft of the Furnace without interference with the chimney draft. On the contrary, it increases the circulation through the chimney by admitting waste air to fill the pipe which carries away any accumulation of soot in the chimney and the carbonic acid gases generated from the fire. The use of this check damper allows sufficient time for heat transmission to the air space within the casing, through the agency of the cycloids and tangent fins, which completely envelop the body and fire pot of the Furnace. These fins absorb the heat from the fire and combustion chamber and present an enormous radiating surface for contact of the passing fresh air within the casing. The result of this excess radiation means more warm air out of each register and less fire in the furnace, therefore less coal consumption.

Heat Deflector

A heat deflector in the top of the combustion chamber baffles the products of combustion before entering the reversible flue. It is constructed open at the top and end. Small openings in the bottom of the deflector allow the ash accumulation to fall into the fire pot, therefore, all parts of the Furnace interior are self-cleaning.

Ash Pan



Every Cycloidal NATIONAL Furnace is supplied with a sheet steel Ash Pan, made with an open end which scoops up all overflow ashes. This obviates the cloud of dust always present during the operation of removing the ashes with a shovel. This dust finds its way into the rooms through the joints of the registers with the flooring, and is more than any other for complaints of the user.



Self-Sealing Joints

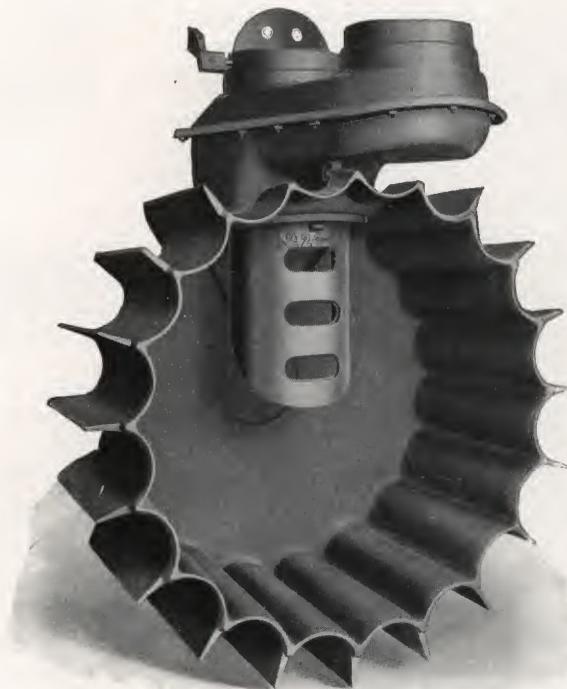
The joints in the Cycloidal NATIONAL Furnace are our invention of self-sealing cup joints. These joints are properly distributed to provide for the necessary expansion and contraction of the castings. These cup joints should be filled with asbestos cement before setting castings together, also cement all door frames before placing into position.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



The Cycloidal NATIONAL Patented smoke burning fire pot, not only performs the office of burning the gases and smoke, but eliminates Ash Dust when shaking the grates. The construction is such, that the twelve $\frac{3}{4}$ -inch holes distributed evenly around the fire pot of No. 21-44, equals an open space of nine square inches. On Nos. 24-48 and 27-51 fourteen $\frac{3}{4}$ -inch holes, or an open space of ten and one-half square inches. When shaking grates, the fine dust is drawn up through these large Fire Pot openings into the combustion chamber. These openings are 200 per cent larger than found in other furnaces. This exclusive sanitary feature can be found only in Cycloidal NATIONAL Furnaces and will be appreciated by the operator.



Cycloidal National Self-Cleaning Radiator, Baffle Plate and Reversible Flue

With Its Immense Radiating Surface

A Furnace with a self-cleaning radiator must be appreciated by the housewife, since it is possible to have clean curtains and wall paper at all times. It not only saves labor but money as well. Owing to the hypocycloidal shape, the broad tangent flanges present an immense surface for the air to impinge upon and multiplies the radiating efficiency many times that of a flat surface, consequently the heating power is greater than ordinary furnaces. The No. 21-44 Cycloidal Radiator is 28 inches in diameter. The circumference of a 28-inch circle is $87\frac{9}{100}$ inches. By measuring the outside circumference of the No. 21-44 Radiator you will find it to be $14\frac{1}{2}$ feet or 100 per cent larger than other furnaces. The Nos. 24-48 and 27-51 will measure the same in proportion. This not only applies to the radiator but to all working parts of the Cycloidal NATIONAL Furnace which means 100 per cent more efficiency and a greater saving of fuel.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

Evaporating Pan



A one-piece Porcelain lined water pan (clean as a china dish) is furnished with the Cycloidal NATIONAL Furnaces. It is demountable for cleaning, and swings outward with the front door, making it convenient to fill with water. It is placed close to the fire pot where it derives sufficient heat to evaporate large quantities of water, thereby keeping the air in the rooms in a pure and healthful state.

Water Coil



For heating water in the Kitchen Range Boiler, openings are provided for the admission of a one-inch pipe coil. These are placed at the top of the feed door where they do not interfere with the shovel while feeding fuel into the fire pot. The water pipes may be extended entirely across the combustion chamber if desired, or extended downward at an angle to the fire pot. However, experience has taught that in doing so it provides too much hot water for domestic purposes, causing the Boiler to steam. We recommend that the coil should not extend more than twelve inches inside the combustion chamber, with the downward slant that promotes circulation.

The large combustion chamber of this Furnace makes it especially adaptable for combination warm air and Hot Water Heating system a convenience for heating remote rooms.

Casings

The casings are made double, namely: an outer casing made of Galvanized iron, the inner casing black iron with a one-inch air circulating space between the two. The inner casing absorbs heat from the Furnace and gives it off again to the passing air; it is far superior to corrugated tin or asbestos. The inner casing prevents the heat from reaching the outer casing, and minimizes the radiation into the cellar. The inner casing forms a secondary heating surface, which is too valuable to be omitted.

Casing Rings

The casing rings are made from solid wrought iron, rolled especially for the purpose. They are non-breakable, neat and strong. The base ring is sectional cast iron. It is cast independently from the ash pit, permitting the use of a foundation for the ash section only, when the furnace is set over a cold air pit.

Castings

All castings used in our NATIONAL Furnaces are made from the same high-grade metallic iron that is used daily in the manufacture of our line of NATIONAL Stoves and Ranges; which is a close grain strong metal, compounded especially to produce an iron that will resist the attack of fire. There are very few Furnaces on the market in which the iron used will show an analysis equal in quality.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Wall Regulator



This regulator is furnished free with every NATIONAL Furnace. It is intended to be fastened to the door casing of the living room, the chains passing through the floor. One chain attaches to the front draft damper — the other to the check damper. This Regulator permits the operator to handle the dampers without going into the cellar.

Manifestly

NATIONAL Furnaces are not like any other Furnaces. They contain the individuality and results of practical knowledge that has taken cognizance of the requirements of the men who have to do with the installation of Furnaces, making our line exceptionally easy to assemble and install. All parts are shipped "knocked down," the largest section will pass through any ordinary door opening.

The structural features are founded upon fact and not theory. They are the best heat generators ever offered the public. The air circulation is unobstructed and will deliver an amount of warm air not possible to obtain from any other Furnace. These features affect the coal pile to a remarkable degree, in that a decidedly notable saving is effected.

If our Furnace would save not more than ten per cent in fuel, then the purchase of any other kind means just 10 per cent tax paid annually. Inability to see, costs money. It is therefore well to look beyond the price-tag to obtain the service that makes for true economies.

Guarantee

We guarantee all parts of our Furnaces to be perfect and in working condition. We further guarantee the capacities as rated, if properly installed, they will cover the requirements. We do not guarantee results of installation.

Installation

We are in position to furnish our customers expert assistance in making up necessary specifications for warm air installation — if you can furnish us drawings of the building or blue prints off of architect's drawing. If these are not available, send us a reasonably plain sketch of the building, giving size of rooms, location of all doors, windows and partition walls; also location and size of chimney. With this information we will be pleased to send you complete working plans so that any ordinary tinner can install the furnace in a perfect manner.

DIAGRAM OF COMPARISON RADIATING SURFACE



- A — Flat or smooth surface.
- B — Corrugated surface.
- C — Hypo-Cycloid surface.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Approved by



A SERIES

Higrade National Furnace

For Hard Coal, Soft Coal, Coke or Wood

Description, Pages 203-209

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



A SERIES

Showing Furnace with casing attached

Approved by



Higrade National Furnace

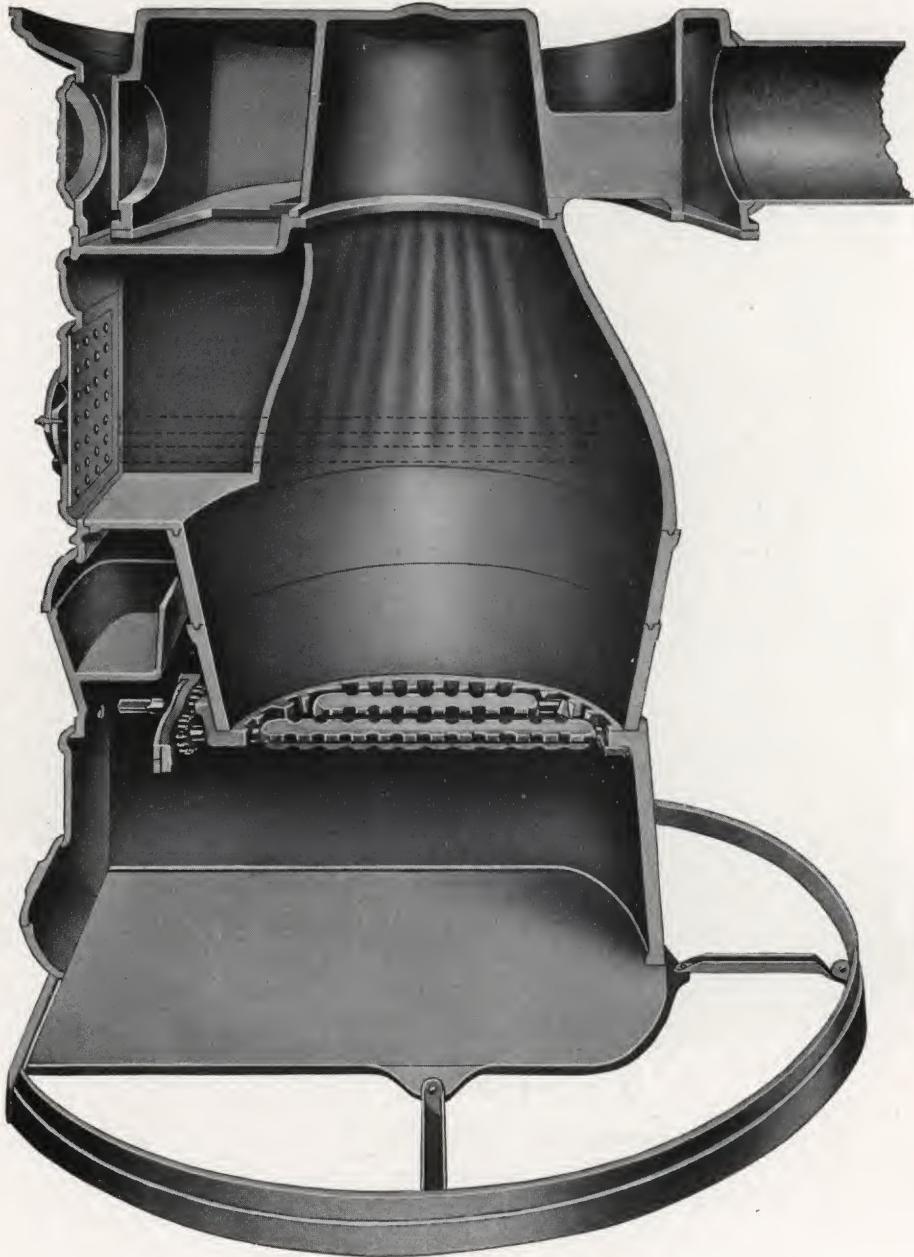
For Hard Coal, Soft Coal, Coke or Wood

Description, Pages 204-209

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Cross Sectional View
Higrade NATIONAL Furnace

The above illustrates our Higrade NATIONAL Furnace cut in half, showing the interior, the joints, large feed opening, large flue space in the radiator. Dotted lines indicate position of the water coil, to heat water for domestic use.

Exceptionally durable and powerful heater.

NATIONAL FURNACES ARE GREAT FUEL SAVERS



National Stoves, Ranges and Furnaces



Detail

A SERIES

Higrade National Pipe Furnace

For Hard Coal, Soft Coal, Coke or Wood

	20A	22A	24A	26A	28A
Diameter Top of Fire Pot.....Inches	19	21½	22½	24	27
Depth of Fire Pot to Grate.....Inches	11	12	13	14	14
Diameter of Radiator.....Inches	29	30½	32½	35½	37½
Diameter of Casing.....Inches	38	41	44	48	52
Height Lower Casing.....Inches	24	24	24	26	26
Height Upper Casing.....Inches	20	24	24	24	26
Height of Castings.....Inches	45	50	50	54	54
Height with 15-inch Bonnet.....Inches	60	65	65	69	69
Size Feed Door Opening.....Inches	10½x10½	12¼x12¼	13x14	13x14½	13x14½
Size Ash Door Opening.....Inches	10½x16	10½x16¾	11½x18½	12x20¼	12x20¼
Size Smoke Collar.....Inches	8	8	8	9	9
Size Water Coil Pipe for Range Boiler.....Inches	1	1	1	1	1
Size Water Pan.....Quarts	8	10	10	10	10
Area Grate Surface.....Square inches	227	298	330	397	500
Amount of warm air area that may be used.. Sq. inches	430	500	552	634	834
Warm air area within the casing.....Square inches	560	630	695	770	932
Heating Capacity per 1,000 cu. ft.....	12-16	16-22	22-30	30-40	34-46
Shipping weight furnace without casing.....Pounds	790	950	1080	1275	1460
Shipping weight furnace with casing.....Pounds	925	1050	1225	1440	1640
Price Furnace without casing.....\$.....	\$.....	\$.....	\$.....	\$.....	\$.....
Price Furnace with 15-inch straight-side Bonnet.....	.....	.....	.....	.....	.....
Wood Grate.....Extra	.....	.....	.....	.....	.....
For extra Bonnet height, add per inch all sizes.....Extra	.....	.....	.....	.....	.....

The superior points of construction and convenience to the user, make the Higrade NATIONAL Furnace well worth the price.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

Higrade National Furnace

Higrade NATIONAL Furnaces must not be confused with other furnaces of this type, since the improvements in construction are far superior.

All Higrade NATIONAL Furnaces are fitted up and assembled with the utmost care, by experienced workmen before leaving the factory. The castings and all parts are then properly marked to simplify the installation, to save time and labor for the dealer. It is unnecessary to move your entire tin shop on a job to install a NATIONAL furnace. They are unlike any other furnace made along similar lines, owing to their distinctive features, that place them in a class by themselves. Each furnace is given a rigid inspection before leaving the assembler's floor, and all parts are properly packed to insure against breakage in transportation. We use only analyzed grey iron in making NATIONALS furnaces, which insures a perfect fire resisting casting, equalizes the expansion and contraction of all parts and prolongs the life of the furnace beyond all others. NATIONALS are not a product of twenty years ago; they are an up-to-date line, containing the later day improvements and refinements known in the art. This gives the user the benefit derived from increased radiating power, resulting in large saving of fuel, cleanliness and convenience in operation. The overweight of NATIONALS adds greatly to durability. Higrade NATIONAL Pipe and pipeless furnaces are easy to install, powerful heaters, very durable, perfectly constructed, and great fuel savers.

An illustrated instruction book how to install Higrade NATIONAL pipeless furnaces and a proper instruction card how to operate either style packed with each furnace. This alone saves time for the dealer and money for the customer.

We ask that you look beyond the price tag in the selection of a heating apparatus for your home, which represents a furnace that is intended to last for years, and therefore should merit your careful investigation.

Thousands are now proving their worth and justify our statement when we say:

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



All Cast Radiator, Showing Heat Travel, Extra Large Flues
for Soft Coal, or Wood

Radiator is adjustable and made of analyzed grey cast iron which is the only metal that will withstand the strain of soft coal. The center section is extra large, allowing the smoke and gases to pass out of the furnace dome and into the radiator, facilitating the draft and radiation. The joint where the radiator fits onto dome, is a deep improved cut shape, with a cast flange or hood covering the cement in the joints, which holds it in place. In making radiator in two sections as we do, it insures an even thickness throughout, which permits equal expansion and contraction of the metal and prevents fire cracking.



Two-piece deep corrugated fire pot with large cup joints. Very heavy and durable



Feed doors are made double, permitting the operator to feed large chunks of wood, if desired. Opening of numbers 20A and B is $10\frac{1}{2} \times 10\frac{1}{2}$ inches, 22A and B is $12\frac{1}{4} \times 12\frac{1}{4}$ inches, 24A and B is 13×14 inches, 26 and 28A and B is $13 \times 14\frac{1}{2}$ inches.

Feed Doors

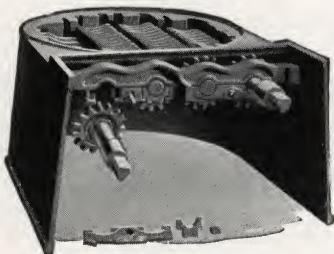
Evaporating Pan

A cast iron, one-piece water pan is furnished with every Higrade NATIONAL Furnace, placed in a convenient position to fill with water. It is removable for cleaning and is located close to the fire pot, where it derives sufficient heat to evaporate large quantities of water, thereby keeping the air in the rooms in a pure and healthful state.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Ash Pit and Grates

Ash-Pit and Grates

The ash pit is extra deep and will protect the grates for a longer period of time by reason of a large space for ash accumulation. The fitting joints are an improvement over other furnaces of this kind. A cup joint, instead of a single joint is used where base connects to bottom, making it absolutely ash and gas tight. The bottom is flat and sets level, which prevents any warping or opening of joints. It is advisable to use a layer of brick or cement base to be placed under the furnace to guard against damp earth.

Grate

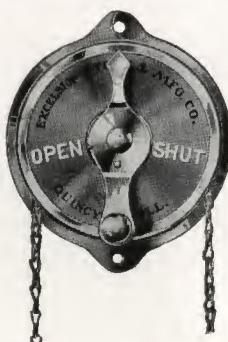
The grate in Higrade NATIONAL is the approved, triangular, revolving bar type. It is geared into pairs, so that half the fire may be cleaned at a time, making it convenient for the operator. The bars are mounted independently. An ingenious construction prevents the operator from removing the grate shaker without leaving all grate bars in their proper relation to the fire. It also permits the operator to equalize the wear on all sides of the grate bars, prolonging the life of the grate.

Self-Sealing Joints

The joints on Higrade NATIONAL are our improved self sealing cup joints. The joints are properly distributed to provide for the necessary expansion and contraction of the metal. In assembling, cement should be placed in the cups, and when castings are placed in their respective positions, it seals them eternally gas tight.

Wall Regulator

This Regulator is furnished free with every Higrade NATIONAL Furnace. It is intended to be fastened to the door casing of the living room, the chains passing through the floor. One chain attaches to the front damper—the other to the check damper. This permits the furnace Dampers to be operated from the living room.



NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Higrade National Furnace Casings

Style "A" Casing for Pipe Furnace

The casing is made of heavy galvanized iron with heavy black iron inner lining and 1-inch air space between the two. Straight side bonnet provides large warm air space and allows straight run of leader pipes.

Style "B" Casing for Pipeless Furnace

The Outer casing is made of heavy Galvanized Iron.

The inner casing is made with three distinct walls consisting of flat heavy galvanized iron outer wall, $\frac{1}{2}$ -inch Asbestocel corrugated fireproof paper center wall, and heavy galvanized corrugated iron inner wall.

The cone bonnet is made same as inner casing excepting that the inner wall of the cone is made of heavy flat galvanized iron instead of corrugated iron which is advantageous to the flow of air.

Casing Rings

Casing rings are made of wrought iron in our own factory, non-breakable, neat and strong. The base ring is sectional cast iron, and independent from the ash pit, permitting the use of a foundation for the ash section only, when furnace is set over a cold air pit.



National Water Coil

We can furnish a two-pipe Water Coil in our Higrade NATIONAL Furnace for heating water in Range Boiler. The coil enters the furnace inside the feed chute and crosses the top of the fire pot. It is capable of heating ample water for domestic purposes.

We can also furnish a Water Jacket Heater for heating water for Hot Water radiation which makes a combination Warm Air and Hot Water heating system.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Sectional View
No. 20 Series

Approved by



National Furnaces

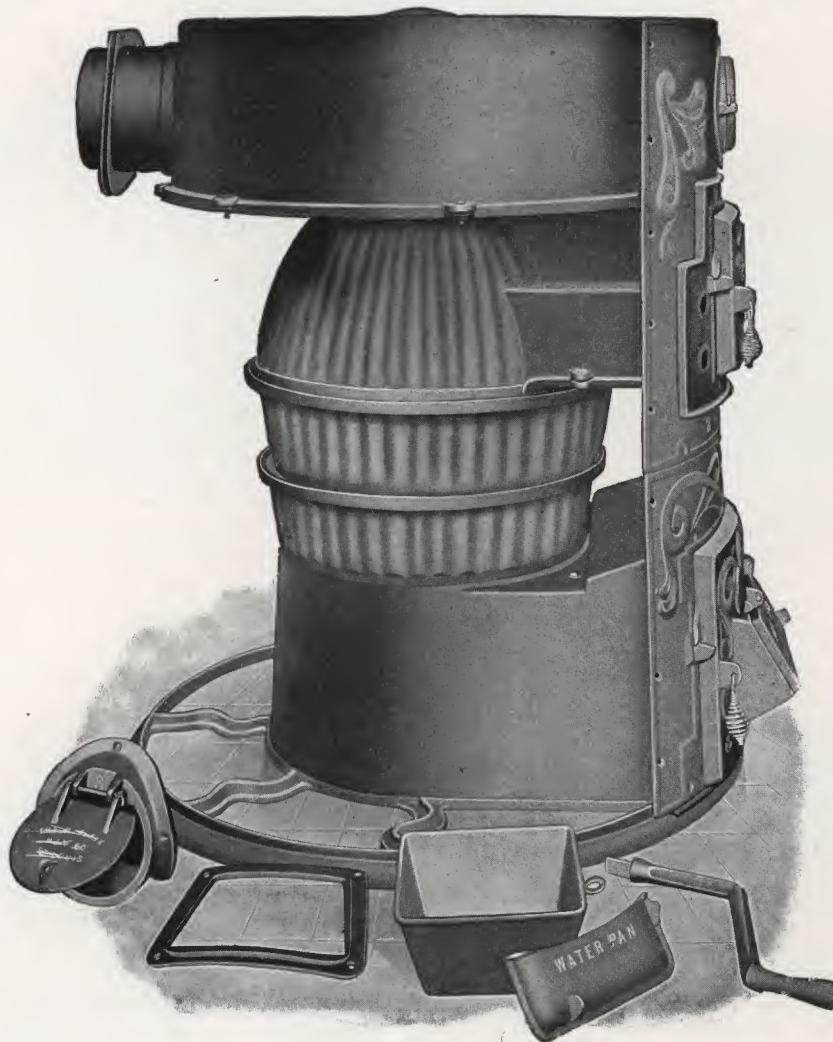
For Soft Coal, Hard Coal or Coke

No.	Dia. Fire Pot	Dia. Casing	Height of Castings	Dia. Smoke Pipe	Warm Air Capacity	Capacity 1000 Cub. Ft.	Weight	Price List Furnace	Price Casing
18	18	30	43	7	236	8-10	600	\$.....	\$.....
20	20	34	45	8	303	10-14	700	.....	.....
22	22	38	47	8	378	14-17	800	.....	.....
24	24	42	49	8	462	17-22	1000	.....	.....
26	26	46	53	9	550	22-27	1200	.....	.....
28	28	50	56	10	670	27-32	1475	.....	.....
30	30	54	59	10	737	32-40	1700	.....	.....

Description, Pages 211-213

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Open view without Casing

National Pipe Furnace

For Soft Coal, Hard Coal or Coke

Approved by



NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

National Furnaces

NATIONAL Furnaces are superior to many of the Old Line Furnaces. They are guaranteed the equal of any other furnace of similar style.

Description of Casing No. 20 Series

Double heavy galvanized casing with an air space between the two. The cold air circulates through this space and prevents radiation into the cellar.

The inner casing is a secondary heating surface; it absorbs heat from the furnace and gives it off again to the passing cold air, which adds much to the efficiency of the furnace. Casings regularly furnished with 12-inch high bonnet.

Description of Casing No. 700 Series

Outer casing made of heavy galvanized iron. Inner casing made of heavy galvanized iron, and double with asbestos sheathing placed between the two, and extends up to cone top of furnace and down to within 12 inches of the floor. The inner lining of double casing is corrugated. The cold air space between outer and inner casing on Nos. 718-720 Furnace is $3\frac{1}{2}$ inches; on Nos. 722, 724, 726, is 4 inches. The space between radiator and inside casing on Nos. 718-720 is $2\frac{1}{2}$ inches; on No. 722, $2\frac{3}{4}$ inches; on No. 724, 3 inches, and on No. 726, $3\frac{1}{2}$ inches; properly spaced to give most amount of heat for a small amount of fuel.

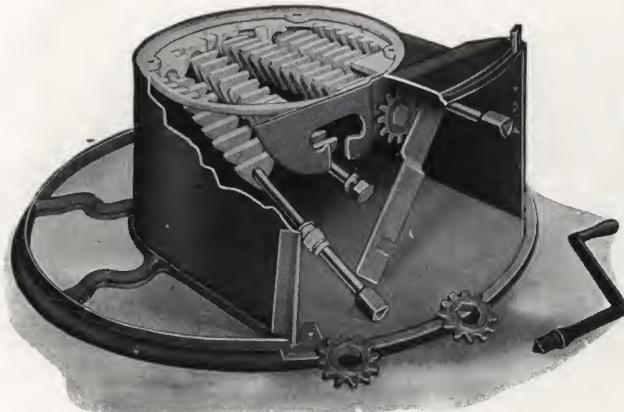
For Additional Detail see Pages 210-213-219

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Special Features of the National Furnace



Deep Ash Pit and Triangular Grate; the Grate is Easily Removed for Renewals.



Two Pieced Deep Corrugated Fire Pot, with Large Cup Joints, Very Heavy and Durable.



All Cast Radiator Showing Heat Travel—Extra Large Flues for Soft Coal.



Gas Fire Pot.

For Coal and Natural Gas

Coal and Gas may be used at the same time or separately as desired.

	Price
No. 20 Gas pot extra	\$
No. 22 Gas pot extra
No. 24 Gas pot extra
No. 26 Gas pot extra

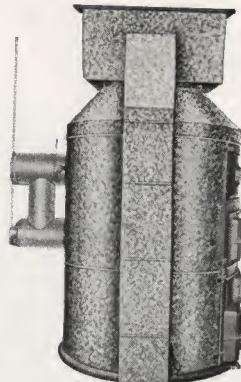
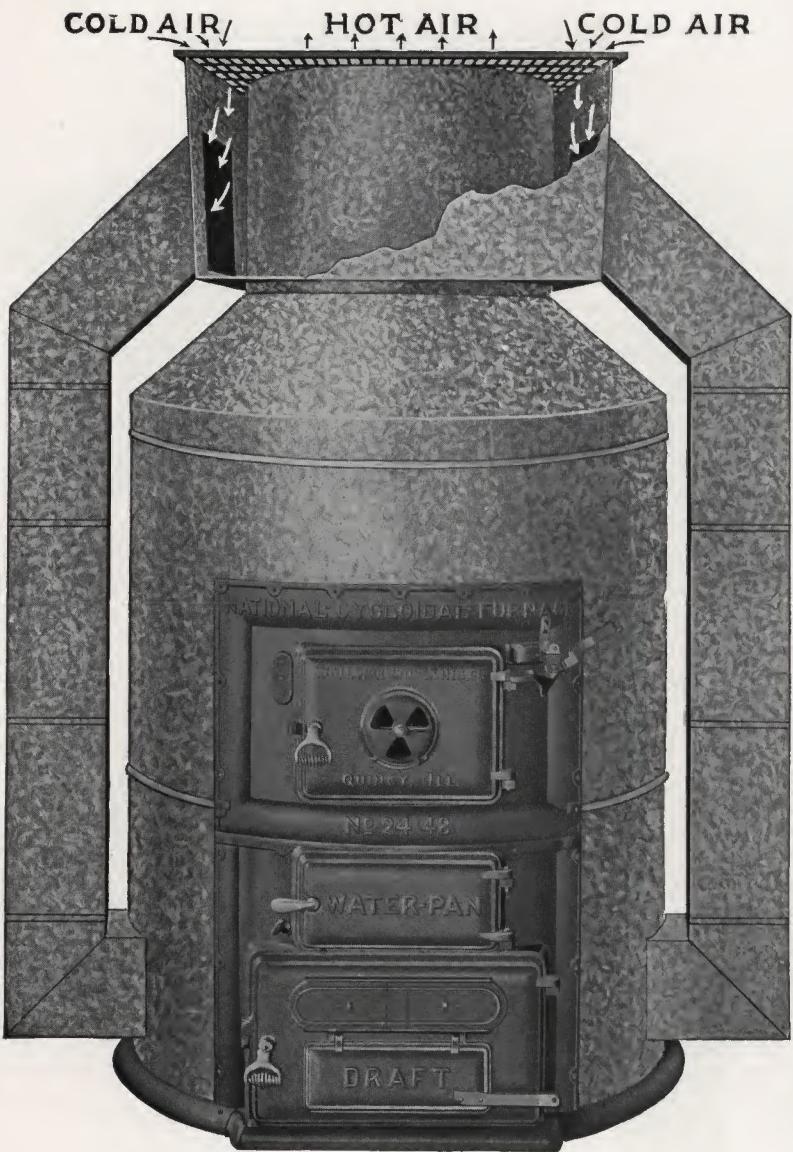
An extra net price to be added to the price of Furnace when we furnish the Gas Fire Pot instead of the regular Fire Pot.

NOTE — Needle point and Air Mixers included.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Side View

Excelsior Stove & Mfg. Co.,
Quincy, Ill.

We enclose you photo of our new building which has recently been completed and we have installed one of your No. 24-48 Cycloidal National Unit Furnaces, for our heating system.

We find this the best heating proposition for our store that has ever been our pleasure to enjoy. We can keep this room at just the right temperature at all times with very little attention and the temperature is just the same all over the room.

We certainly appreciate the new heating System.

Yours very truly,
E. E. DeHart, Prop.,
The Farmers' Store,
Weatherby, Mo.

Approved by



B SERIES

Cycloidal National Unit Furnace

Description, Pages 193-201 and 215

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Cycloidal National Unit Furnace

B SERIES

For Soft Coal, Coke or Wood

Number		Heating Capacity In 1000 Cu. Feet	Total Height	Shipping Weight	*Price
21-44B	With Casing and Oxidized Register Face 35x35 inches.....	22-30	7½ feet	1900 lbs.	\$.....
24-48B	With Casing and Oxidized Register Face 40x40 inches.....	30-40	7½ feet	2170 lbs.	.....
27-51B	With Casing and Oxidized Register Face 45x45 inches.....	34-46	8 feet	2550 lbs.	.....
	Additional Height		Per inch, extra.		.....

*Price does not include Smoke Pipe or Double Tee Joint.

Sizes warm air outlet pipe, No. 21 Pipe, 26 in., No. 24 Pipe, 30 in., No. 27 Pipe, 36 in.

Sizes cold air pipes. No. 21 Pipe 10 x 20 in., No. 24 Pipe 12 x 20 in., No. 27 Pipe 14x24 in.

Description

Furnaces cased in such manner that all warm air generated by the Furnace is discharged out of a single Register have become popular during the last few years. This form of installation is practical only when the conditions are favorable.

This system is successful in modern homes that are built with folding doors, or "Cased door openings" between several of the rooms in a residence. Rooms on second floor may also be heated provided there is a hall on first and second floor to permit the warm air to flow to the second floor rooms. In the absence of a hall the second floor rooms may be heated by placing registers in the ceiling, thereby connecting the first and second floor rooms.

This unit system of heating contemplates the doors between the several rooms are to be left open at all times since the principle involved in heating an entire residence from one central point of supply means merely the residence be put into one undivided space, therefore the more nearly this condition can be brought about, the more equal temperature may be expected in the various rooms. While it is impossible to heat all the space in a residence which is subdivided into rooms to the same degree of temperature, if the door openings that separate the rooms are of ample size, there will be a very slight difference indicated in the rooms on the first floor, and since the second floor rooms are invariably used as sleeping apartments, which do not require above 60 degrees of temperature, this system will render satisfactory service. **For churches, auditoriums, etc., no better method of heating can be recommended.**

Our sales on NATIONAL Unit Furnaces have all been successful, which we believe is due to our form of structure, particularly our improved method of Cold Air supply.

It is a well-known fact that cold air is the motive power which forces the warm air out of the casing, therefore the air should be delivered to the bottom of the casing in a cool state. Our system of cold air supply does not preheat the air. The cold air entering the Assembly Box around the warm air pipe is not detained, it passes down the two side ducts to the bottom of the casing, where it enters, and has the greatest efficiency to push the warm air into the rooms above.

There is no Furnace on the market so well adapted for the Unit system as our Cycloidal NATIONAL, and is guaranteed to do the work as indicated above.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



Sectional view

Approved by



B SERIES

Higrade National Pipeless Furnace

For Hard Coal, Soft Coal, Coke or Wood

Description, Pages 203-209 — Detail, Page 217

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Detail

B SERIES

Higrade National Pipeless Furnace

For Hard Coal, Soft Coal, Coke or Wood

	20B	22B	24B	26B	28B
Number of Furnace.....					
Diameter Top of Fire Pot.....	Inches	19	21½	22½	24
Depth of Fire Pot to Grate.....	Inches	11	12	13	14
Diameter of Radiator.....	Inches	29	30½	32½	35½
Diameter Inside Casing.....	Inches	38	41	44	48
Diameter Outside Casing.....	Inches	46	49	52	58
Height of Castings.....	Inches	45	50	50	54
Size Feed Door opening.....	Inches	10½x10½	12¼x12¼	13x14	13x14½
Size Ash Door opening.....	Inches	10½x16	10½x16¾	11½x18½	12x20¼
Size Smoke Collar.....	Inches	8	8	8	9
Size Water Coil Pipe for Range Boiler.....	Inches	1	1	1	1
Size Water Pan.....	Quarts	8	10	10	10
Size Register.....	Inches	33x33	35x35	36x36	40x40
Size Warm Air Pipe.....	Inches	24	26	28	30
Area Grate Surface.....	Square inches	227	298	330	397
Height Bottom of Furnace to Register.....	Inches	96	96	96	96
Height can be reduced to.....	Inches	72	72	72	72
Heating Capacity in 1000 cubic feet.....		12-16	16-22	22-30	30-40
Shipping Weight.....	Pounds	1150	1300	1500	1775
Price with Casing and B. J. Register.....	\$.....	\$.....	\$.....	\$.....	\$.....
Oxidized Copper Register.....	Extra	.....	.....	.....	.....
Additional height Casing per inch.....	Extra	.....	.....	.....	.....
Wood Grate.....	Extra	.....	.....	.....	.....

Investigation will convince anyone that the Higrade NATIONAL Pipeless Furnace is the best heater, best construction and best value for the dealer and user.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



B SERIES

Higrade National Pipeless Furnace

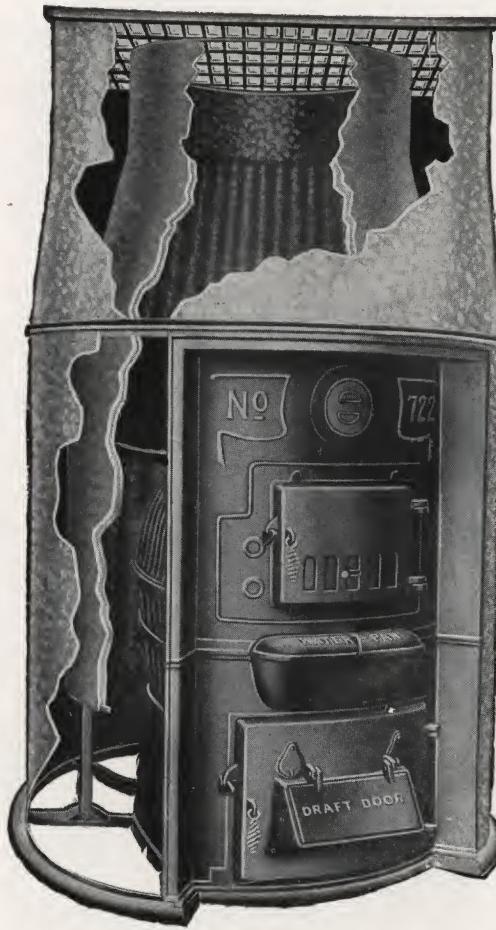
Showing 14 Superior Points

NATIONAL FURNACES ARE GREAT FUEL SAVERS



• TRADE MARK •

National Stoves, Ranges and Furnaces



One Register Series
Sectional View

Approved by



• TRADE MARK •

Pipeless National Furnace

For Soft Coal, Hard Coal or Coke

No.	Dia. Fire Pot	Size of Register	Dia. Hot Air Pipe	Dia. Casing	Capacity 1000 Cub. Feet	Weight	*Price
718	18 inches	24x27	18 inches	38 inches	9-11	880	\$.....
720	20 inches	30x30	22 inches	42 inches	12-16	1000	.....
722	22 inches	34x34	26 inches	46 inches	16-19	1100	.....
724	24 inches	36x36	28 inches	50 inches	19-24	1300	.....
726	26 inches	40x40	30 inches	54 inches	24-29	1500	.....

Size Smoke Pipe 718 is 7 inch; 720-722-724 is 8 inch; No. 726 is 9 inch. Complete height all sizes, ~~6 feet 8 inches~~ 8 Feet
Additional Height.....Per inch, extra. \$.....

*Price includes Black Japanned Register and all fittings except the Smoke Pipe.

Description, Pages 211-213

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

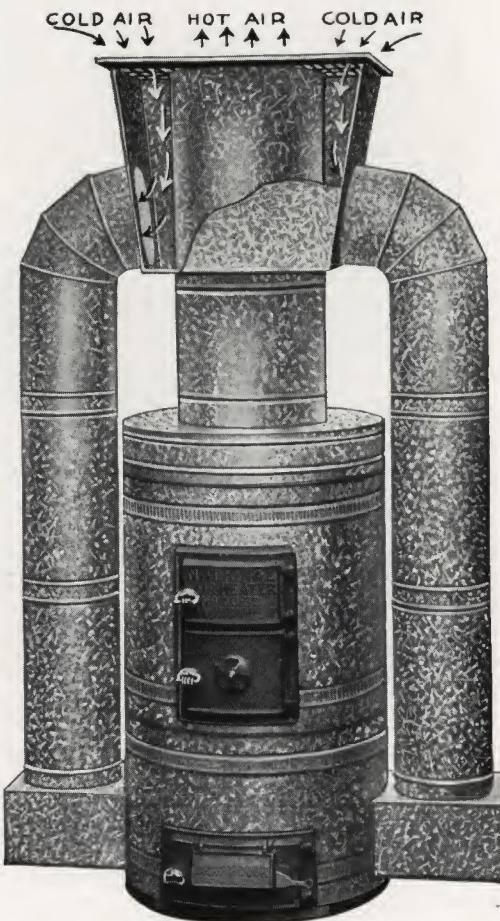
Air Heater Unit National Furnace



Sectional Side View
Showing Internal Construction of Heater



Side View
Showing Heater Mounted Complete



Sectional Front View
Showing Hot and Cold Air Circulation

Description, Page 221

NATIONAL FURNACES ARE GREAT FUEL SAVERS



National Stoves, Ranges and Furnaces



Air Heater Unit National Furnace

Number	Diameter of Fire Pot	Diameter of Body	Diameter of Casing	Entire Height	Size of Feed Door	Size of Smoke Pipe
20-32D-C	20 inches	23½ inches	32 inches	97 inches	11x16½ inches	8 inches
Number		Heating Capacity		Shipping Weight		Price
20-32D-C		12,000-16,000 cu. ft.		790 lbs.		\$.....

Additional Height may be had if desired Per inch, extra \$.....

Price includes apparatus complete (except smoke pipe) with 24x30 black japanned register face and galvanized furnace tee with check damper, also regulating chains and plate to operate dampers from room above.

Description

This furnace is arranged to heat, from single register face, any ordinary size residence that is divided into five or six rooms, whose combined area does not exceed 16,000 cubic feet.

The heated air is conducted from the furnace through the large center pipe, and discharged from the central portion of the register face. The cold air enters the square galvanized iron box surrounding the hot air pipe, and descends to the bottom of the furnace through the two side pipes.

The cold air, which is the motive power that forces the warm air out of the furnace into the rooms, is drawn from all the rooms and is replaced by the warm air; therefore the temperature is equalized in all the rooms in which the adjoining doors are left open.

Register openings may be cut through the ceiling from the first to the second floor rooms; in that manner the entire house may be heated from the one central point.

In rooms provided with double doors, the register face should be placed directly in the doorway for a better distribution of the heat.

One opening in the floor, 24x30 inches, to accommodate the register face, being the only requirement.

The heater is made very strong and durable. It has a heavy corrugated fire pot, triangular grate, all cast body. Large double feed doors, for convenience in feeding coal or wood.

The sectional blast ring around the top of the fire pot is supplied with hot blast through the tube, extending from the front of the base. This superheated air is discharged at the top of the fire, which is the point of combustion for the volatile gases, and thoroughly consumes all the black smoke and soot when using soft coal.

The entire casing is made of galvanized iron and asbestos lined. Each heater is provided with a sheet steel ash-pan, cast water pan and grate shaker.

To install the apparatus requires cutting of one joist only. Joists are usually set to 16-inch centers, therefore the removing of one joist where the register is to be placed leaves a 30-inch clear space, permitting the register face to be set either the narrow or long way as desired.

We furnish the apparatus 97 inches high, which meets the requirements for an 8 feet deep cellar, measuring from the cellar bottom to the flooring above. It can be reduced in height to 80 inches, or may be extended to any height greater than 8 feet if especially ordered.

NATIONAL FURNACES ALWAYS SATISFY



National Stoves, Ranges and Furnaces



Double Wall Pipe

Ventilated and Strictly Fire Proof

*Requires no Asbestos Covering, or Iron Laths
Easiest Pipe to put together on the market*

List Price Double Wall Pipe

Size	No. 0 (2 in.)	No. 1 (4 in.)	No. 2 (6 in.)	No. 3 (9 in.)	No. 4 (12½ in.)	No. 5 (18¾ in.)	No. 35 (2 feet)	No. 38 (3 ft. 2 in.)	No. 6 (8 feet)	56 Ft. Crate
3 x 10	\$0.38	\$0.45	\$0.60	\$0.76	\$0.84	\$1.14	\$1.50	\$2.40	\$6.00	\$45.00
4 x 11	.38	.45	.60	.76	.84	1.14	1.50	2.40	6.00	45.00
3 x 12	.54	.60	.76	.90	.98	1.36	1.80	2.85	7.20	54.00
4 x 13	.54	.60	.76	.90	.98	1.36	1.80	2.85	7.20	54.00
4 x 14	.60	.76	.90	1.06	1.28	1.58	2.10	3.38	8.40	64.50
4 x 15	.84	.90	1.06	1.14	1.36	2.04	2.40	3.83	9.60	72.60
6 x 13	.84	.90	1.06	1.14	1.50	2.05	2.70	4.28	10.80	81.00
6 x 14	.90	.98	1.14	1.20	1.50	2.25	2.96	4.80	11.40	85.50

56-feet Crates Double Wall Pipe packed, unless otherwise ordered, with the following lengths. Two pieces of 2-inch, 4-inch, 9-inch, and 12½-inch and four each of 6-inch, 2 feet, 8 feet and six pieces 18¾ inch.

NOTE—Length given above are exclusive of lap.

List Price of Double Wall Pipe Fittings

Size	Boot No. 7-8 9-51-52 Stack Head No. 10	Boot No. 36-37-50 Stack Head No. 12-14-15	Stack Angle No. 21 Boot-Offset No. 53	Stack Angle No. 24	Stack Elbow No. 18-19-20 Tee No. 25-16	Stack Elbow, No. 22-23-29	Register Box No. 108-109 Tee No. 106	Reducer No. 27-28	Offset No. 101- 102-103- 104-105
3 x 10	\$1.68	\$2.04	\$0.64	\$0.84	\$1.26	\$1.68	\$1.75	\$1.40	\$2.10
4 x 11	1.68	2.04	.64	.84	1.26	1.68	1.75	1.40	2.10
3 x 12	1.76	2.10	.70	.90	1.40	1.76	1.75	1.40	2.10
4 x 13	1.76	2.10	.70	.90	1.40	1.76	1.75	1.40	2.10
4 x 14	1.90	2.24	.84	.98	1.62	1.90	2.45	1.62	2.80
4 x 15	2.03	2.38	.88	1.05	1.75	2.03	2.45	1.75	2.80
6 x 13	2.38	2.74	1.20	1.40	2.45	2.38	2.80	1.90	3.15
6 x 14	2.60	2.94	1.48	1.68	2.60	2.60	3.15	2.10	3.50

NOTE—When ordering Boots always mention size of collar wanted. See detail below.

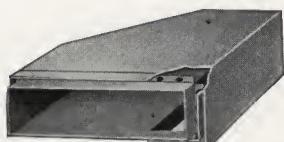
Detail of Double Wall Pipe

Size	Area of Pipe	Inside Measurement	Outside Measurement	Size Collars in Boots	Size Registers
3 x 10	24 inch	2 $\frac{3}{8}$ x 9	3 x 9 $\frac{5}{8}$	7 and 8 inch	6 x 8-8 x 10
4 x 11	30 inch	3 x 10	3 $\frac{5}{8}$ x 10 $\frac{5}{8}$	8 and 9 inch	8 x 10-9 x 12
3 x 12	28 $\frac{1}{2}$ inch	2 $\frac{3}{8}$ x 12	3 x 12 $\frac{5}{8}$	8 and 9 inch	8 x 10-9 x 12
4 x 13	36 inch	3 x 12	3 $\frac{5}{8}$ x 12 $\frac{5}{8}$	8-9 and 10 inch	8 x 10-10 x 14
4 x 14	39 inch	3 x 13	3 $\frac{5}{8}$ x 13 $\frac{5}{8}$	9 and 10 inch	10 x 12-10 x 14
4 x 15	42 inch	3 x 14	3 $\frac{5}{8}$ x 14 $\frac{5}{8}$	10 and 12 inch	10 x 12-10 x 14
6 x 13	48 inch	5 x 12	5 $\frac{5}{8}$ x 12 $\frac{5}{8}$	9 and 10 inch	10 x 12-10 x 14
6 x 14	65 inch	5 $\frac{1}{2}$ x 13	6 $\frac{1}{8}$ x 13 $\frac{5}{8}$	10 and 12 inch	10 x 14-12 x 15



Excelsior Stove & Manufacturing Company

Double Wall Pipe Fittings for Wall Stacks



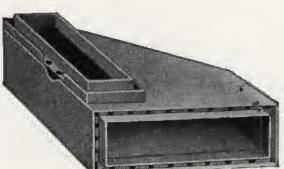
No. 101 Stack Offset



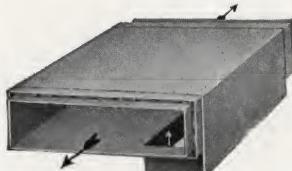
No. 102 Stack Offset



No. 103 Stack Offset



No. 104 Stack Offset



No. 105 Stack Offset



No. 106 Stack Tee



No. 18 Stack Elbow



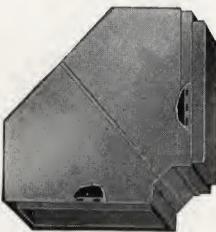
No. 19 Stack Elbow



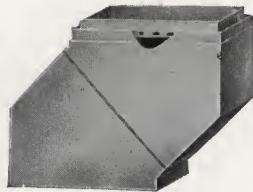
No. 20 Stack Elbow



No. 21 Stack Angle



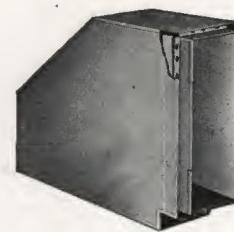
No. 22 Stack Elbow



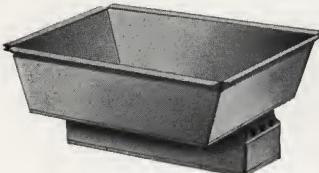
No. 23 Stack Elbow



No. 24 Stack Angle



No. 29 Stack Elbow



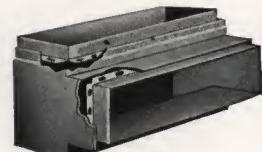
*No. 108 Register Box



*No. 109 Register Box



No. 16 Tee



No. 25 Through Tee

*Size Registers Used with No. 108-109 Register Boxes

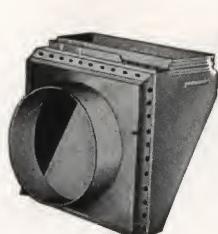
Number Pipe.....	3x10	4x11	3x12	4x13	4x14	4x15	6x13	6x14
Size Register.....	8x10	{ 8x10- 8x12 9x12-10x12	8x12- 9x12 10x12-10x14	8x12- 9x12 10x12-10x14	10x14	10x14	10x12	10x14

Price, Page 223

National Stoves, Ranges and Furnaces



Double Wall Pipe Fittings for Wall Stacks



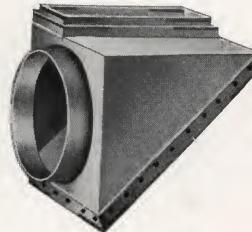
No. 7 Boot



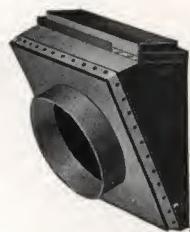
No. 9 Boot



No. 36 Boot



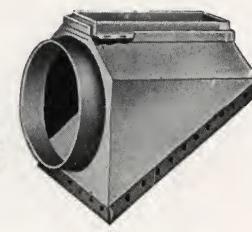
No. 37 Boot



No. 52 Boot



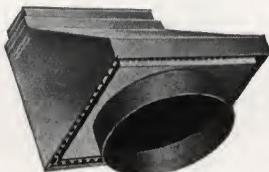
Combination No. 52 Boot and No. 53 Boot Offset



No. 50 Boot



No. 51 Boot



No. 8 Boot



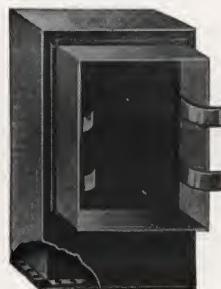
No. 28 Reducer



No. 27 Reducer



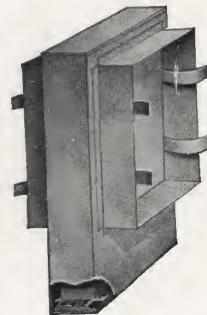
No. 14 Stack Head
With Floor Flange



No. 10 Stack Head
With Side Wall Flange



No. 15 Stack Head
With Pipe Extension



No. 12 Stack Head
Double Header

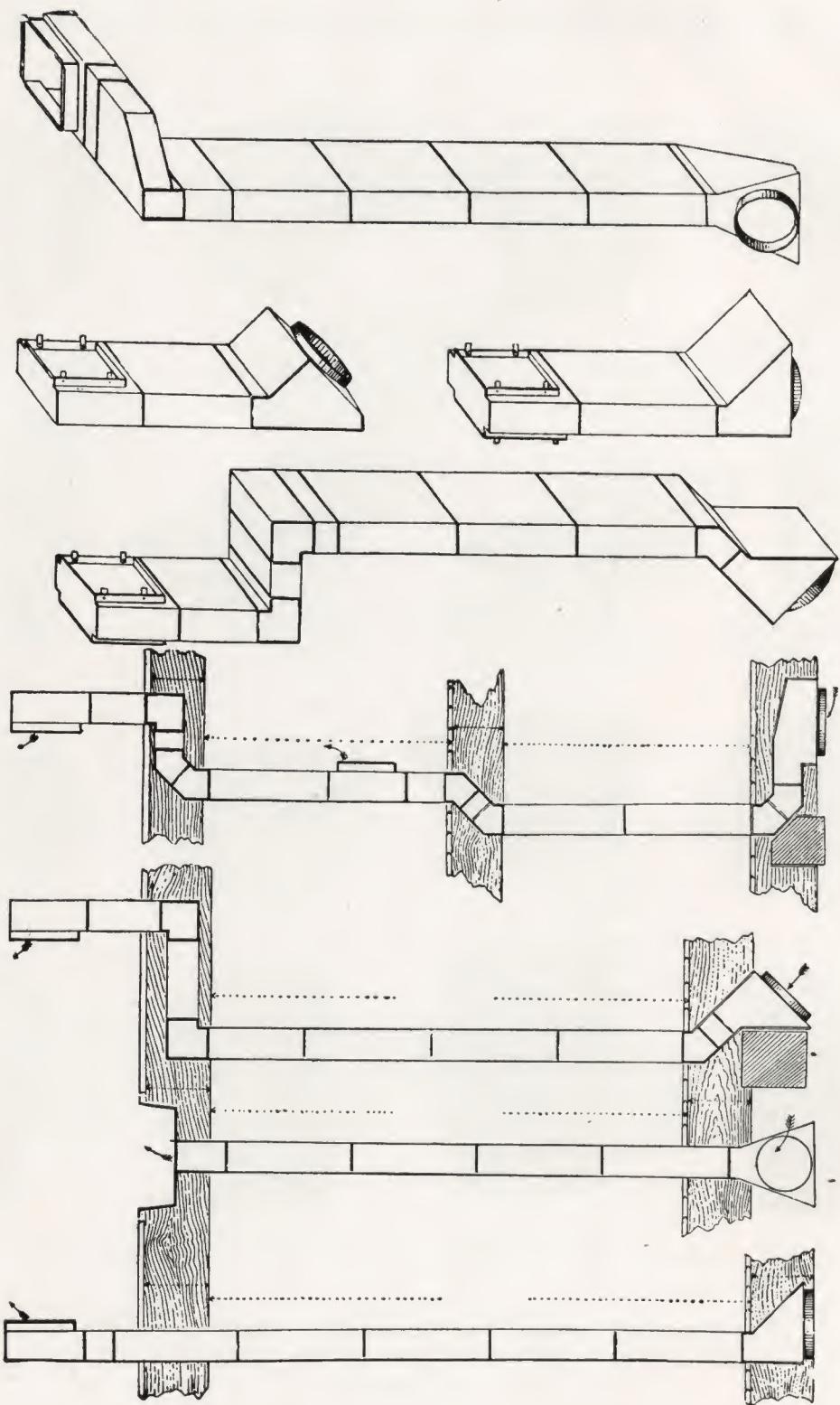
These Stack Heads are for Side Wall Registers, not Base Board Registers

Price, Page 223



Excelsior Stove & Manufacturing Company

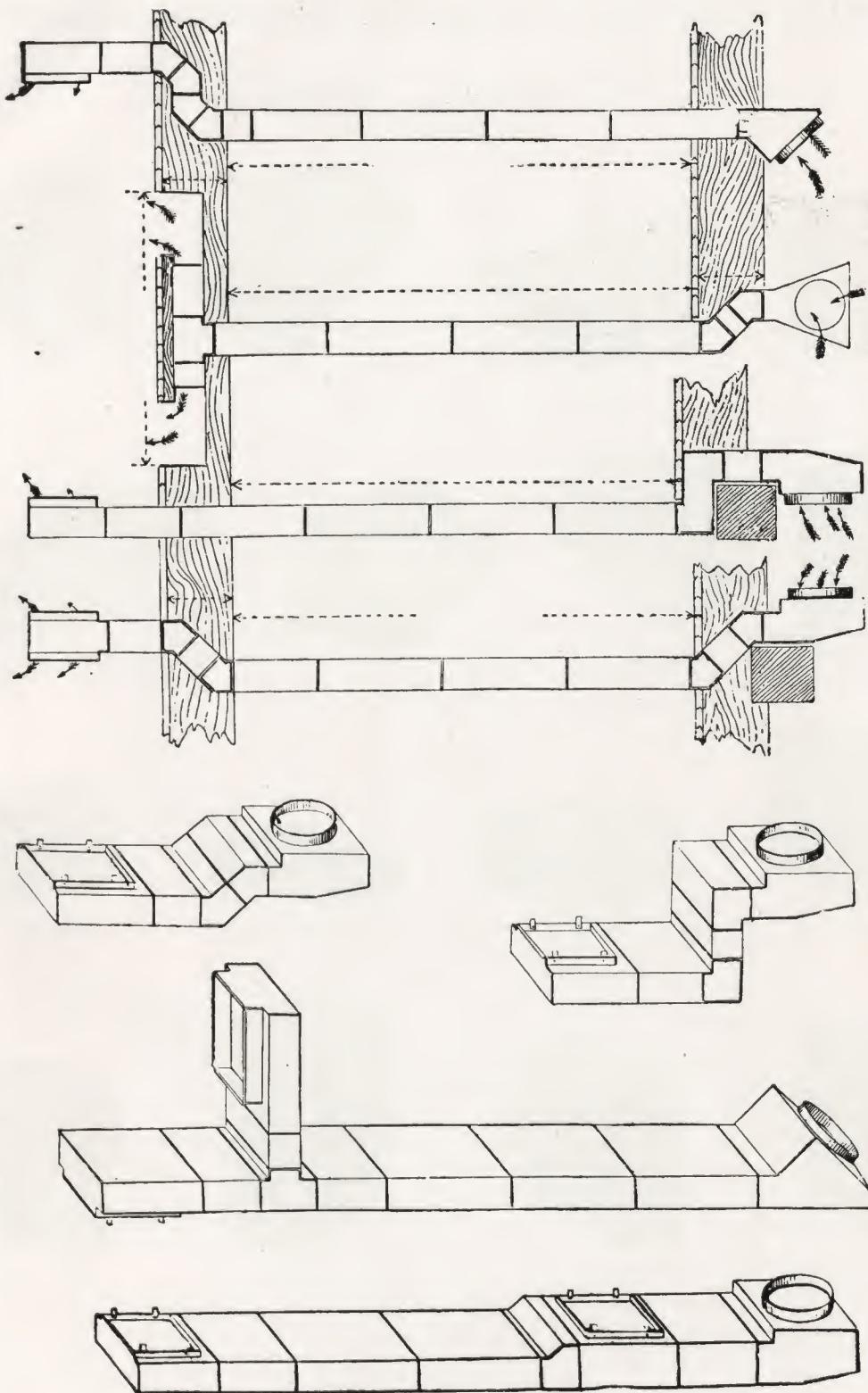
Samples of Combinations That Can Be Made from Our Double Wall Pipe



National Stoves, Ranges and Furnaces



Samples of Combinations That Can Be Made from Our Double Wall Pipe

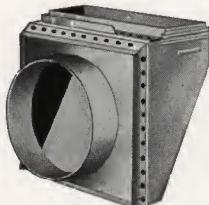




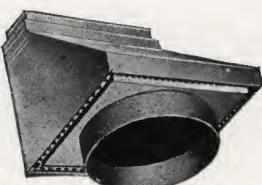
Excelsior Stove & Manufacturing Company

Double Wall Pipe Fittings for Base Board Registers

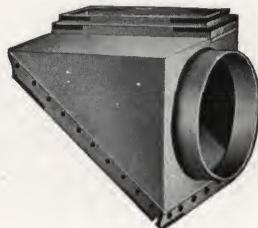
For One Register on First Floor



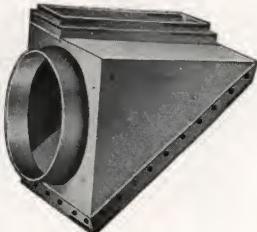
No. 207 Boot



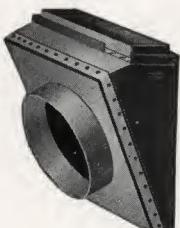
No. 208 Boot



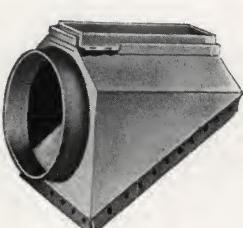
No. 236 Boot



No. 237 Boot



No. 252 Boot



No. 250 Boot



No. 251 Boot



No. 252 Boot and
253 Boot Offset



No. 202 1/2 Section



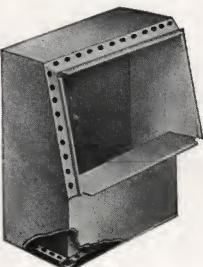
No. 201 Section



No. 200 Section



No. 221 Angle



No. 1A Stack Head
for first Floor



No. 4A Stack Head
for Second Floor



No. 3A Stack Head
for First Floor



No. 5A Stack Head
for Second Floor

NOTE—These fittings are for one Register only.

Prices, Page 229

National Stoves, Ranges and Furnaces



List Price of Fittings for Base Board Registers

Hart & Cooley or Tuttle & Bailey

For One Register

Size of Register	Inside Size of Stack Heads and Boots	Outside Size of Stack Heads and Boots	Size of Collar in Boots	Stack Heads No. 1A-4A and Boots for Same	Stack Heads No. 3A-5A and Boots for Same	Boot Offset No. 253 Stack Angle No. 221	2-inch Section No. 200	4-inch Section No. 201	8-inch Section No. 202½
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H & C No. 132½ and T & B No. 44-99 Size 6½

8x13	5½x13	6½x13½	10-12	\$2.60	\$2.94	\$1.30	\$0.84	\$0.91	\$1.12
9x12	5½x12	6½x12½	9-10	2.38	2.75	1.20	.77	.84	1.05

H & C No. 132¾ and T & B No. 44-99 Size 6½

10x12	5½x12	6½x12½	9-10-12	2.38	2.75	1.20	.77	.84	1.05
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H & C No. 133¼ and T & B No. 44-99 Size 7½

12x14	6½x14	7½x14½	10-12-14	3.50	3.86	3.50	1.26	1.34	1.68
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H & C No. 100 and T & B No. 44-99 Size 6½

7x12	6x12	6½x12½	9-10	2.38	2.75	1.20	.77	.84	1.05
8x13	6x13	6½x13½	10-12	2.60	2.94	1.30	.84	.91	1.12
10x12	6x12	6½x12½	9-10-12	2.38	2.75	1.20	.77	.84	1.05

H & C No. 125-131¼ and T & B No. 44-99 Size 3½

* 8x10	3x10	3½x10½	8-9	2.10	2.45	1.05	.70	.77	.98
* 8x12	3x12	3½x12½	9-10	2.38	2.75	1.20	.77	.84	1.05
* 9x12	3x12	3½x12½	9-10	2.38	2.75	1.20	.77	.84	1.05
* 10x12	3x12	3½x12½	9-10	2.38	2.75	1.20	.77	.84	1.05

T & B No. 44-99 Size 8½

10x12	8x12	8½x12½	10-12	3.08	3.44	Price same as No. 1-3 A Stack Heads	1.12	1.20	1.54
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H & C No. 115 and T & B No. 900 Size 8½

10x12	8x12	8½x12½	10-12	3.08	3.44	Price same as No. 1-3 A Stack Heads	1.12	1.20	1.54
12x14	8x14	8½x14½	12-14	3.50	3.86	Price same as No. 1-3 A Stack Heads	1.26	1.34	1.68

NOTE—When ordering Stack Heads always mention size, register and style it is intended to fit.

When ordering Boots always mention size collar wanted and what size register it is intended to fit.

* No. 4A and No. 5A Stack Heads only may be used on these sizes.

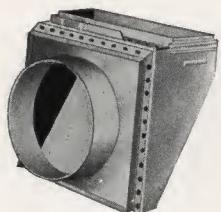
Size of Extension Collar on No. 3A Stack Heads			Size of Extension Pipe by Using No. 27-28 Reducer		
8x10		4x11			
7x12		3x12 or 4x13			4x11
8x12		3x12 or 4x13			4x11
9x12		3x12 or 4x13			4x11
10x12		3x12 or 4x13			4x11
8x13		4x14			4x13
12x14		4x15			4x13 or 4x14



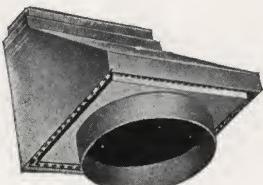
Excelsior Stove & Manufacturing Company

Double Wall Pipe Fittings for Base Board Registers

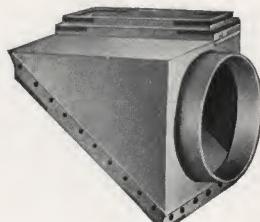
For Two Registers on First Floor



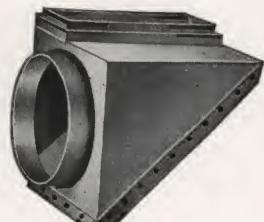
No. 507 Boot



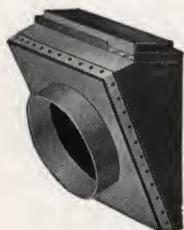
No. 508 Boot



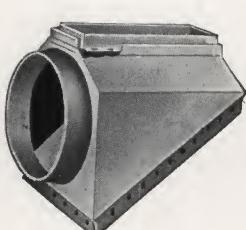
No. 536 Boot



No. 537 Boot



No. 552 Boot



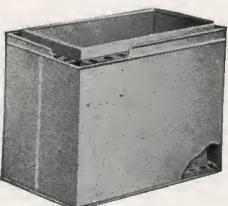
No. 550 Boot



No. 551 Boot



No. 552 Boot and 553 Boot Offset



No. 502 1/2 Section



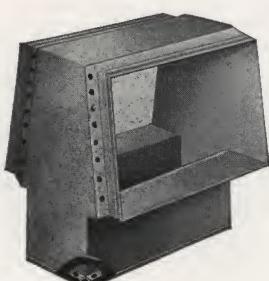
No. 501 Section



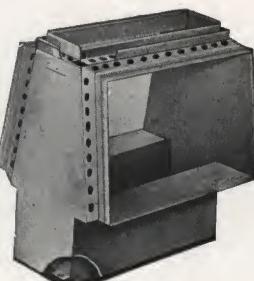
No. 500 Section



No. 521 Angle



No. 2A Stack Head
for First Floor



No. 6A Stack Head
for First Floor

NOTE—These fittings are for Two Registers (Double Headers).

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National Stoves, Ranges and Furnaces



List Price of Fittings for Base Board Registers

Hart & Cooley or Tuttle & Bailey

For Two Registers (Double Headers)

Size of Register	Inside Size of Stack Heads and Boots	Outside Size of Stack Heads and Boots	Size of Collar in Boots	Stack Head No. 2A and Boots for Same	Stack Head No. 6A and Boots for Same	Boot Offset No. 553 Stack Angle No. 521	2-inch Section No. 500	4-inch Section No. 501	8-inch Section No. 502½
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H & C No. 132½ and T & B No. 44-99 Size 6½

8x13	8 x13	8½x13½	10-12	\$2.94	\$3.30	\$1.47	\$1.19	\$1.26	\$1.48
9x12	8 x12	8½x12½	9-10	2.75	3.08	1.38	1.12	1.20	1.40

H & C 132¾ and T & B No. 44-99 Size 6½

10x12	8 x12	8½x12½	9-10-12	2.75	3.08	1.38	1.12	1.20	1.40
10x13	8½x13	9½x13½	10-12-14	2.94	3.30	1.47	1.19	1.26	1.48

H & C No. 133¼ and T & B No. 44-99 Size 7½

12x14	10 x14	10½x14½	12-14	3.86	4.20	3.86	1.62	1.68	1.90
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H & C No. 100 and T & B No. 44-99 Size 6½

8x13	9x13	9½x13½	10-12	2.94	3.30	1.47	1.19	1.26	1.48
10x12	9x12	9½x12½	9-10-12	2.75	3.08	1.38	1.12	1.20	1.40

H & C No. 125-131¼ and T & B No. 44-99 Size 3½

* 8x10	3x10	3½x10½	8-9	2.45	2.80	1.24	1.06	1.12	1.34
* 8x12	3x12	3½x12½	9-10	2.75	3.08	1.38	1.12	1.20	1.40
* 9x12	3x12	3½x12½	9-10	2.75	3.08	1.38	1.12	1.20	1.40
* 10x12	3x12	3½x12½	9-10	2.75	3.08	1.38	1.12	1.20	1.40

T & B No. 44-99 Size 8½

10x12	13x12	13½x12½	10-12	3.44	3.78	Price same as No. 2-6A Stack Heads	1.48	1.54	1.76
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H & C No. 115 and T & B No. 900 Size 8½

10x12	13x12	13½x12½	10-12	3.44	3.78	Price same as No. 2-6A Stack Heads	1.48	1.54	1.76
12x14	13x14	13½x14½	12-14	3.86	4.20	Price same as No. 2-6A Stack Heads	1.62	1.68	1.90

NOTE—When ordering Stack Heads always mention size register and style it is intended to fit.

When ordering Boots always mention size collar wanted and what size register it is intended to fit.

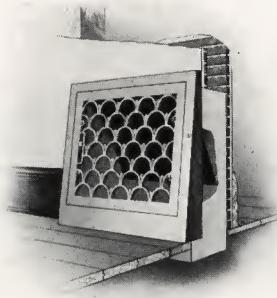
*No. 5A Stack Heads only may be used on these sizes.

Size of Extension Collar on No. 6A Stack Head				Size of Extension Pipe by Using No. 27 Reducer			
8x10		4x11					
8x12		3x12 or 4x13		4x11			
9x12		3x12 or 4x13		4x11			
10x12		3x12 or 4x13		4x11			
10x12	T & B 8½	4x14		4x11 or 4x13			
10x12	H & C 115	4x14		4x11 or 4x13			
10x13		4x14		4x11 or 4x13			
12x14		4x14		4x11 or 4x13 or 4x14			
12x14	H & C 115	4x15		4x13 or 4x14			

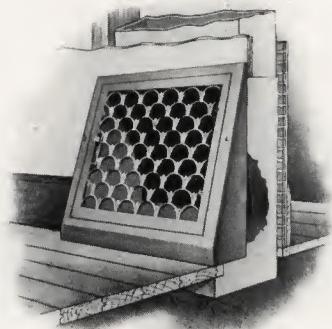


Excelsior Stove & Manufacturing Company

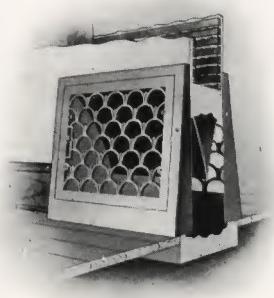
Tuttle & Bailey Base Board Registers



Register with No. 1 A and 4 A
Stack Head

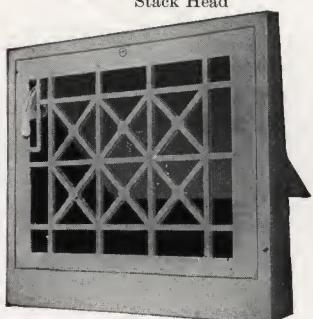


Register with 3 A and 6 A
Stack Head



Register with No. 5 A and 2 A
Stack Head

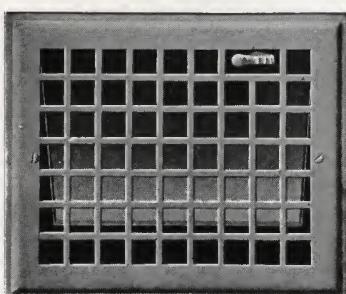
The above illustrations show the installation of Base Board Registers.



No. 44 Cast Iron



No. 99-900 All Steel



Reversible Wafer Sets—Horizontal

List Prices No. 44

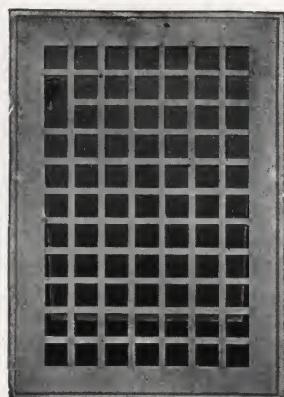
Size Register	Black Japanned	Oxidized Copper	Plated Brass Bronze or Nickel
3 $\frac{5}{8}$ - 8x10	\$2.00	\$3.50	\$3.85
3 $\frac{5}{8}$ - 8x12	2.40	3.95	4.35
3 $\frac{5}{8}$ - 8x13	2.50	4.00	4.40
3 $\frac{5}{8}$ - 9x12	2.50	4.00	4.40
5 $\frac{5}{8}$ - 8x10	2.00	3.50	3.85
5 $\frac{5}{8}$ - 9x12	2.50	4.00	4.40
6 $\frac{1}{8}$ - 9x12	3.00	4.50	4.90
6 $\frac{1}{8}$ - 10x12	3.65	5.40	6.00
6 $\frac{1}{8}$ - 10x13	4.20	6.20	7.00
7 $\frac{1}{8}$ - 12x14	5.85	8.00	9.00

List Prices No. 900

8 $\frac{5}{8}$ - 10x12	4.50	6.50	7.50
8 $\frac{5}{8}$ - 12x14	6.50	8.50	9.50

T. & B. Reversible Wafer Register, All Steel

Size	Black Japanned	White Japanned	Oxidized Copper	Plated Brass Bronze or Nickel
8x10	\$1.65	\$2.00	\$3.15	\$.85
8x12	1.90	2.30	3.65	4.40
9x12	2.10	2.55	4.00	5.10
10x12	2.40	2.90	4.40	5.50
10x14	3.15	3.80	5.25	6.55
12x14	4.35	5.25	6.85	8.25
12x15	4.50	5.40	7.00	8.50



Reversible Wafer Sets—Vertical

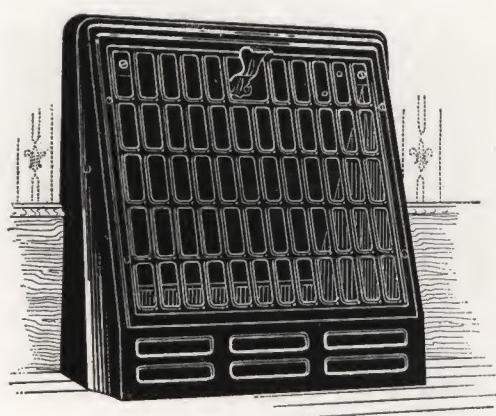
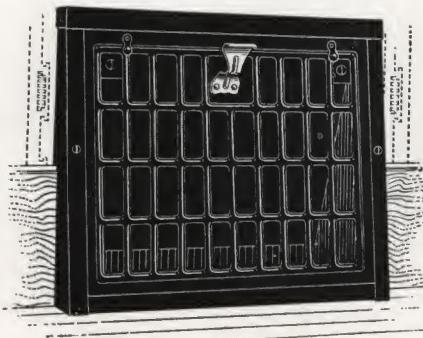
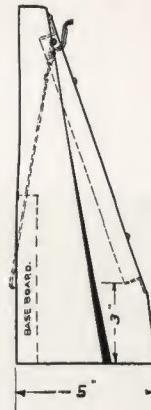
National Stoves, Ranges and Furnaces



Hart & Cooley Steel

Quick Detachable Face on 131 $\frac{1}{4}$ -132 $\frac{1}{4}$ -132 $\frac{3}{4}$ -133 $\frac{1}{4}$ Only

List Prices



No. 131 $\frac{1}{4}$ Depth 1 $\frac{1}{4}$ Inches

Size	Black Japanned	White Japanned	Oxidized Copper	Electro- Plated Brass-Bronze Nickel
8x10	\$2.00	\$2.35	\$3.50	\$3.85
8x12	2.40	2.90	3.95	4.35
9x12	2.50	3.00	4.00	4.40
10x12	3.00	3.60	4.90	5.50

No. 132 $\frac{1}{4}$ Depth 2 $\frac{1}{4}$ Inches

Size	Black Japanned	White Japanned	Oxidized Copper	Electro- Plated Brass-Bronze Nickel
8x10	2.00	2.35	3.50	3.85
8x12	2.40	2.90	3.95	4.35
8x13	2.75	3.25	4.25	4.65
9x12	3.00	3.50	4.50	4.90
10x12	3.65	4.25	5.40	6.00

No. 132 $\frac{3}{4}$ Depth 2 $\frac{3}{4}$ Inches

10x13	4.20	5.00	6.20	7.00
10x14	4.50	5.25	6.70	7.50

No. 133 $\frac{1}{4}$ Depth 3 $\frac{1}{4}$ Inches

11x13	4.50	5.25	6.75	7.50
12x14	5.85	6.85	8.00	9.00

No. 125 Depth 1 $\frac{1}{4}$ Inches

Size	Black Japanned	White Japanned	Oxidized Copper	Electro- Plated Bronze-Brass Nickel
8x10	2.00	2.35	3.50	3.85
8x12	2.40	2.90	3.95	4.35
9x12	2.50	3.00	4.00	4.40
10x12	3.00	3.60	4.90	5.50

No. 100 Depth 3 Inches

7x10	2.55	3.00	4.50	4.50
7x12	3.40	3.90	5.50	5.50
8x13	4.25	4.85	6.60	6.60
10x12	5.10	5.85	7.60	7.60
10x14	6.00	6.85	8.50	8.50
12x14	7.15	8.15	10.00	10.00

No. 115 Depth 5 Inches

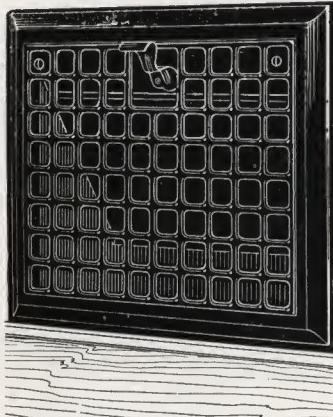
10x12	6.00	6.85	8.50	8.50
12x14	7.50	9.00	12.00	12.00



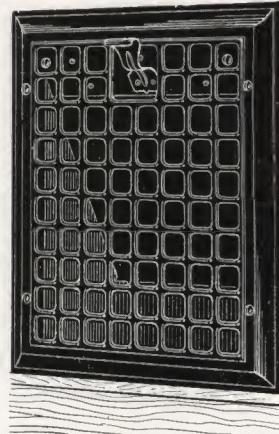
Excelsior Stove & Manufacturing Company

Hart & Cooley Steel Side Wall Registers

Single Valve—Convex Face



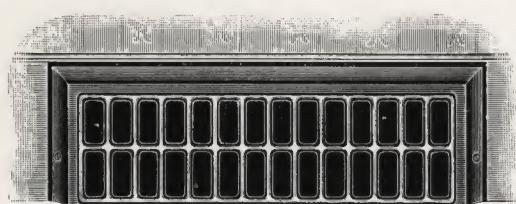
No. 340 Sets—Horizontal



No. 350 Sets—Vertical

List Prices — No. 340 and No. 350

Size	Black Japanned	White Japanned	Electro- Plated, Brass Bronze Oxidized
8x10	\$1.65	\$2.00	\$3.15
8x12	1.90	2.30	3.65
9x12	2.10	2.55	4.00
10x12	2.40	2.90	4.40
10x14	3.15	3.80	5.25



No. 655—Base Board Cold Air Intake

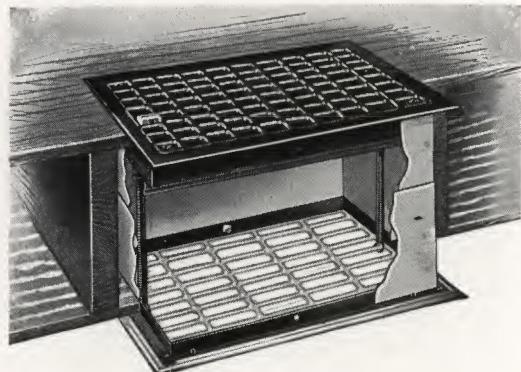
No.	Size	Area	Overall	Black Japan	White Japan	Oxidized Copper
655	5x14	45 in.	5½x16	\$1.00	\$1.40	\$2.00
655	5x30	100 in.	5½x32	2.15	3.00	4.60
600	10x14	84 in.	11½x16	2.50	3.00	4.50
600	10x30	180 in.	11½x32	5.00	6.25	9.00

No. 655, Depth 2 inches. No. 600, Depth 3 inches.

H. & C. No. 2250 Adjustable Ventilators

	List
Size 8x12.....	\$4.80
Size 10x14.....	7.60

Designed to carry surplus heat from a lower to an upper room. Each consists of one Black Japanned Steel Floor Register and White Face, attached to a tin box which is adjustable from 7 to 12 inches in depth.



No. 2250

National Stoves, Ranges and Furnaces



Wood Register Faces

For Cold Air Ducts

Made of hardwood (plain). Can be finished with the interior woodwork.

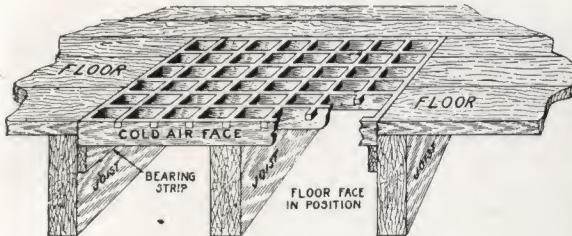


Fig. 1

The above cut shows how to properly install our Wood Registers.

NOTE.— They are set level with the flooring.

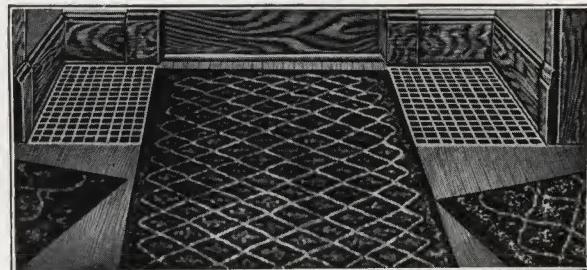


Fig. 2

This cut shows installation of Wood Register in hall floor. One or two may be used,

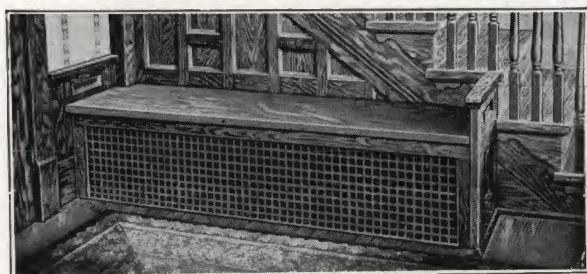


Fig. 3

This cut shows installation in hall seat.

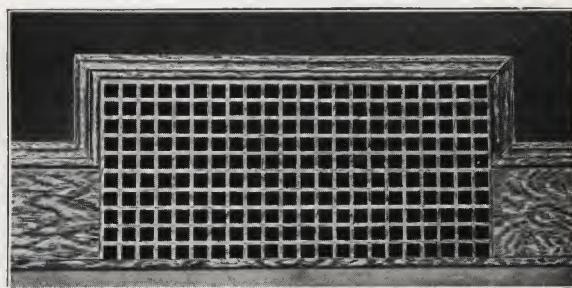


Fig. 4

This cut shows installation in base-board.

FLOOR FACES				SEAT FRONT OR SIDE WALL				BASE BOARD			
Size	List	Area of Air Sq. In.	Nearest Size Rd. Pipe	Size	List	Area of Air Sq. In.	Nearest Size: Rd. Pipe	Size	List	Area of Air Sq. In.	Nearest Size Rd. Pipe
14x16	\$1.55	112	12	30x14	\$2.92	210	16	24x 6	\$2.00	72	9½
18x18	2.25	162	14	36x14	3.50	252	18	36x 6	3.00	108	12
18x22	2.75	198	16	40x14	3.89	280	19	40x 6	3.34	120	12½
20x26	3.61	260	18	48x14	4.67	336	21	42x 6	3.50	126	13
20x34	4.72	340	20	60x14	5.83	420	23	24x 7	2.00	84	10½
22x34	5.19	374	22	72x14	7.00	504	25½	36x 7	3.00	126	12½
24x24	4.00	288	18	30x16	3.34	240	17½	40x 7	3.34	140	13
26x34	6.14	442	24	36x16	4.00	288	19	42x 7	3.50	147	13½
28x28	5.45	392	22½	40x16	4.45	320	20	48x 7	4.00	168	14½
30x30	6.25	450	24	42x16	4.64	336	22	30x 8	2.50	120	12½
30x36	7.50	540	26	48x16	5.34	384	22	36x 8	3.00	144	13½
32x34	7.55	544	26	60x16	6.67	480	25	40x 8	3.34	160	14
34x36	8.50	612	28	72x16	8.00	576	27	30x10	2.50	150	14
38x38	10.03	722	30	48x18	6.00	432	23½	40x10	3.34	200	16
40x40	11.12	800	32	30x18	3.75	270	18½	48x10	4.00	240	17½

Any size up to 36x48 can be furnished to order.

These hardwood Register Faces for cold air ducts are made of oak strips. The square strips are let into the larger strips which makes the top of the face level.

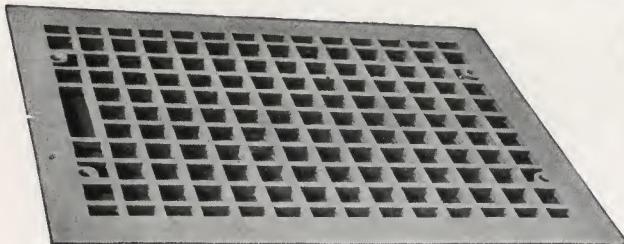


Excelsior Stove & Manufacturing Company

Cast Iron, Semi Steel or All Steel Floor Register



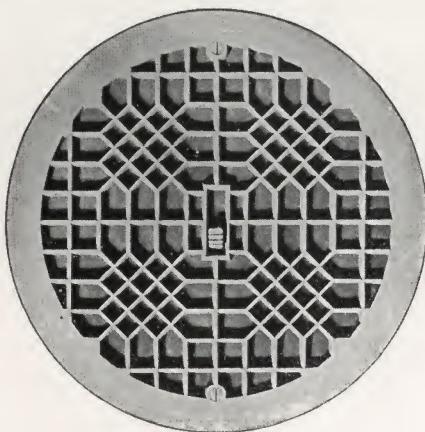
Floor Register



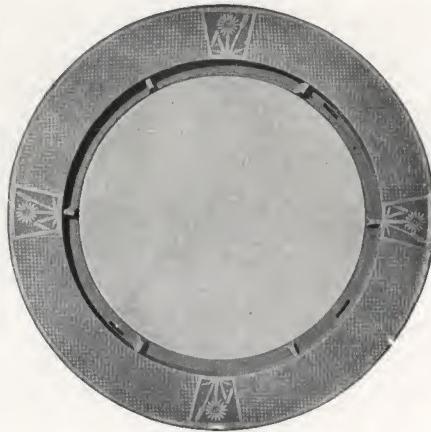
Register Face



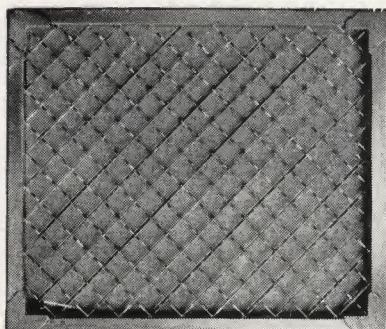
Floor Border



Cast Round Floor Register



Cast Round Floor Border



No. 127 Wire Grill

No. 127 Wire Grill

These Grills are made with angle frames; any size or finish can be furnished.

No standard lists. Prices quoted on specifications.

When ordering give dimensions of the opening to be covered.

See register prices opposite page.

National Stoves, Ranges and Furnaces



Standard List Prices

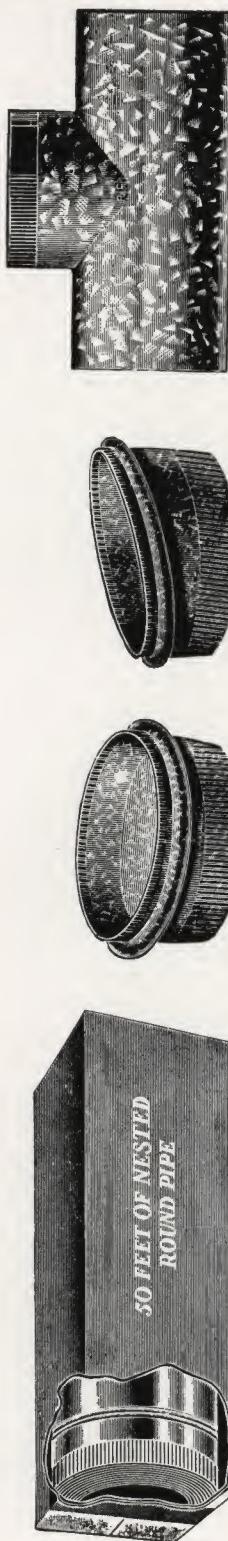
Size of Opening	JAPANNED BLACK			JAPANNED WHITE			ELECTRO-PLATED					
	Register	Register Face	Floor Border	Register	Register Face	Floor Border	OXIDIZED COPPER			BRASS, BRONZE, NICKEL		
							Register	Register Face	Floor Border	Register	Register Face	Floor Border
8x10	\$1.65	\$1.10	\$1.25	\$2.00	\$1.45	\$3.15	\$2.60	\$2.75	\$3.85	\$3.30	\$3.90	40
8x12	1.90	1.30	1.50	2.30	1.70	3.65	3.05	3.25	4.40	3.75	4.40	48
9x12	2.10	1.45	1.65	2.55	1.90	4.00	3.35	3.55	5.10	4.45	5.00	54
9x14	3.10	2.15	2.15	3.70	2.75	5.20	4.25	4.25	6.50	5.50	5.95	63
10x12	2.40	1.70	1.75	2.90	2.20	4.40	3.70	3.75	5.50	4.80	5.35	60
10x14	3.15	2.20	2.20	3.80	2.85	5.25	4.30	4.30	6.55	5.60	6.00	70
10x16	4.85	2.95	2.95	5.85	3.95	7.20	5.30	5.30	8.60	6.70	7.20	80
12x14	4.35	2.80	2.80	5.25	3.65	6.85	5.35	5.35	8.25	6.75	7.35	84
12x15	4.50	2.90	2.90	5.40	3.80	7.00	5.40	5.40	8.50	6.90	7.60	90
12x16	5.60	3.50	3.50	6.70	4.60	8.25	6.15	6.15	9.75	7.65	8.25	96
12x20	9.00	4.50	4.50	10.80	6.30	12.20	7.60	7.60	14.10	9.50	9.90	120
14x14	7.90	4.05	4.05	9.45	5.60	11.00	7.15	7.15	14.30	9.60	10.00	98
14x16	8.50	4.30	4.30	10.20	6.00	11.50	7.30	7.30	16.50	11.00	11.00	112
14x18	9.00	4.50	4.50	10.80	6.30	12.00	7.50	7.50	18.50	12.00	12.15	126
15x30	27.50	10.75	10.75	30.25	13.20	33.00	18.00	18.00	37.50	25.00	21.60	225
16x18	12.00	5.30	5.30	13.20	6.50	16.20	9.50	9.50	22.25	14.25	13.25	144
16x20	12.35	6.10	6.10	13.60	7.35	16.55	10.30	10.30	24.60	16.00	14.00	160
16x24	15.00	7.00	7.00	16.50	8.50	20.00	12.00	12.00	29.60	19.25	17.10	192
18x20	19.50	7.60	7.60	21.45	9.55	24.75	12.85	12.85	29.00	18.00	17.00	190
18x24	21.50	8.35	8.35	23.65	10.50	27.75	14.60	14.60	34.25	22.50	18.75	216
18x36	38.00	17.25	17.25	41.80	21.05	48.50	28.10	26.00	54.00	36.00	28.00	324
20x22	21.60	8.40	8.40	23.75	10.55	27.60	14.40	14.40	35.70	23.50	19.00	220
20x24	22.00	8.60	8.60	24.20	10.80	28.20	14.80	14.80	39.00	25.50	21.70	240
20x26	23.50	9.50	9.50	25.85	11.85	32.00	17.50	17.50	42.00	27.50	22.00	260
20x28	28.90	11.50	11.50	31.80	14.40	37.40	20.00	20.00	45.50	30.00	24.50	280
22x24	29.50	11.80	11.80	32.45	14.75	37.90	20.20	20.20	44.00	29.00	23.00	264
22x26	31.00	13.10	13.10	34.10	16.20	41.00	23.00	23.00	48.00	32.00	25.50	286
22x28	33.90	13.90	13.90	37.30	17.30	44.00	24.00	24.00	52.00	34.00	27.50	308
24x24	30.00	12.00	12.00	33.00	15.00	40.00	22.00	22.00	49.00	32.50	26.00	288
24x27	33.95	14.00	14.00	37.35	17.40	45.00	25.00	25.00	56.00	37.00	29.00	324
24x30	38.00	17.25	17.25	41.80	21.05	50.00	29.25	28.25	62.00	41.50	32.00	360
24x36	50.00	22.00	22.00	55.00	27.00	65.50	37.50	34.25	74.00	50.30	36.50	432
27x27	37.25	17.00	17.00	40.95	20.70	49.25	29.00	28.00	66.00	44.50	34.00	365
27x38	56.00	25.00	61.60	30.60	76.00	45.00	36.00	94.00	64.00	46.00	513	
28x28	44.00	19.00	19.00	48.40	23.40	57.50	32.50	31.00	72.00	49.00	36.40	392
30x30	49.00	21.50	21.50	53.90	26.40	65.00	37.00	34.00	85.00	56.00	41.00	450
30x36	67.50	28.50	28.50	74.25	35.25	90.00	51.00	41.00	102.00	70.00	48.00	540
30x42	77.50	33.00	29.00	85.25	40.75	102.00	57.50	50.50	119.00	87.00	60.00	630
36x36	80.00	35.00	29.50	88.00	43.00	105.00	60.00	54.50	127.00	83.00	66.00	648
36x40	105.00	44.00	32.10	115.50	54.50	135.00	74.00	62.10	142.00	95.00	76.00	720
36x48	132.00	54.00	40.00	145.20	67.20	168.00	90.00	76.00	173.00	103.00	87.00	864
38x38	100.00	43.50	32.00	110.00	53.50	130.00	71.00	59.50	145.00	95.50	77.00	722
38x42	120.00	50.00	36.00	132.00	62.00	155.00	85.00	71.00	160.00	100.00	83.50	798

Round Floor Registers—All Cast

16	\$11.00	\$5.10	\$5.10	\$12.20	\$6.20	\$15.00	\$9.10	\$9.10	\$19.75	\$12.80	\$12.50	100
18	18.50	7.20	7.20	20.35	9.05	23.75	12.45	12.45	26.00	16.50	15.00	127
20	19.75	8.00	8.00	21.75	10.00	24.75	13.00	13.00	32.40	21.20	18.10	157
24	30.00	12.00	12.00	33.00	15.00	40.00	22.00	22.00	49.00	32.50	26.00	226
28	44.00	19.00	19.00	48.40	23.40	57.50	32.50	31.00	72.00	49.00	36.40	308
30	49.00	21.50	21.50	53.90	26.40	65.00	37.00	34.00	85.00	56.00	41.00	353
36	80.00	35.00	29.50	88.00	43.00	105.00	60.00	54.50	127.00	83.00	66.00	509



Excelsior Stove & Manufacturing Company



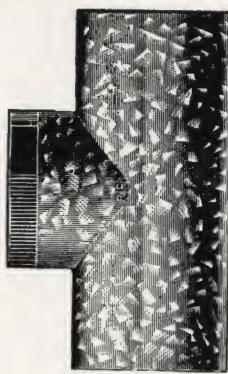
Nested Pipe



Top Collar



Side Collar

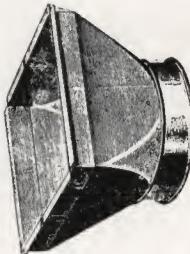


Tee Joint

List Price Tin, Galvanized, Black Iron Round Pipe, Etc.

Size	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36								
I C Tin Pipe, Nested	\$0.29	\$0.31	\$0.33	\$0.35	\$0.39	\$0.45	\$0.53	\$0.60	\$0.70	\$0.80	\$0.90	\$1.00	\$1.10	\$1.20	\$1.30	\$1.40	\$1.50	\$1.60	\$1.70	\$1.80	\$1.90	\$2.10	\$2.40	\$2.70	\$2.70	\$2.70	\$2.70	\$2.70	\$2.70	\$2.70	\$2.70	\$2.70							
I X Tin Pipe, Nested . . . . .	.37	.39	.41	.43	.45	.48	.53	.58	.64	.70	.76	.80	.84	.90	.95	.98	.1.05	.1.20	.1.35	.1.50	.1.65	.1.80	.2.10	.2.40	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70				
Galvanized Iron 26 Gauge, Nested . . . . .	.36	.40	.42	.44	.46	.48	.53	.58	.64	.70	.76	.80	.84	.90	.95	.98	.1.05	.1.20	.1.35	.1.50	.1.65	.1.80	.2.10	.2.40	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70	.2.70				
Galvanized Iron 24 Gauge, Nested45	.50	.54	.58	.64	.70	.76	.82	.88	.94	.98	.1.05	.1.10	.1.15	.1.20	.1.25	.1.30	.1.35	.1.40	.1.45	.1.50	.1.60	.1.70	.1.80	.1.90	.2.00	.2.10	.2.20	.2.30	.2.40	.2.50	.2.60	.2.70	.2.80	.2.90				
Black Iron 24 Gauge36	.40	.42	.44	.46	.48	.53	.58	.64	.70	.76	.80	.84	.90	.95	.98	.1.05	.1.20	.1.35	.1.50	.1.65	.1.80	.2.00	.2.20	.2.40	.2.60	.2.80	.2.90	.3.00	.3.10	.3.20	.3.30	.3.40	.3.50	.3.60				
Black Iron Tee, 26 Gauge, per foot	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60					
Galvanized and Black Iron Tees, 26 Gauge, each	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40					
Galvanized Casing Collars for side of Bonnet, each	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Galvanized Casing Collars for top of Bonnet, each	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24					
Hot Air Pipe Dampers24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24

List Price Tin, Galvanized, Black Iron Round Pipe, Etc.



Tin Register Box, Funnel Shaped



Register Box Without Collar



Galvanized Register Box

List Price Single Register Boxes

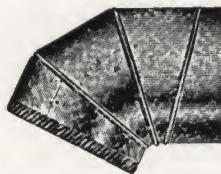
Size Box	6x8	8x10	8x12	9x12	10x12	10x14	12x14	12x15	14x16	14x18	14x20	16x20	16x24	18x24	20x24	20x26	21x29	24x24	27x27	27x38	30x30	36x36														
Size Collars, ins.	6	8	8	8-9	9-10	10-12	10-12	12-14	12-14	12-14	12-14	14-16	14-16	14-16	16-18	18-20	18-20	18-20	18-20	20-21	24-26	26-28	28-30	30-36												
I C Tin	\$0.60	\$0.60	\$0.64	\$0.64	\$0.64	\$0.72	\$0.80	\$0.96	\$0.96	\$0.96	\$0.96	\$1.20	\$1.20	\$1.20	\$2.20	\$2.50	\$3.00	\$3.60	\$4.00	\$4.50	\$5.00	\$6.00	\$6.50	\$8.00	\$7.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00					
I X Tin75	.75	.80	.80	.80	.90	.90	1.00	1.00	1.00	1.00	1.20	1.20	1.20	2.00	2.20	2.60	3.00	3.60	4.00	4.50	5.00	6.00	6.50	8.00	7.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
Galv. Iron	

Second Floor Single Boxes 10 inches deep, without collars same price as above.

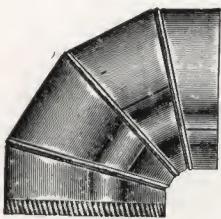
Double Register Boxes add 50% to above prices.

NOTE.— When Galvanized Register Boxes are wanted, it is well to remember that boxes for Hot Air have large end collars, and boxes for Cold Air have small end collars. Orders should therefore state for what purpose they are to be used.

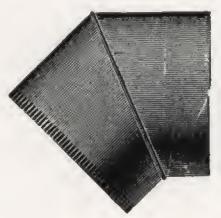
National Stoves, Ranges and Furnaces



Adjustable



90 Degree



45 Degree



30 Degree

List Price Each, Adjustable Tin, Galvanized and Black Elbows

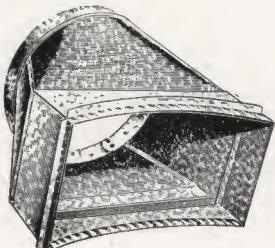
Size.....	.....inches	5	6	7	8	9	10	12	14	16	18	20	22	24	26	28	30	36
Elbows, 4-piece, 90°, 1 C Tin.....		\$0.38	\$0.42	\$0.46	\$0.50	\$0.60	\$0.76	\$1.00	\$1.50	\$2.00	\$2.50	\$3.10	...	...	...	...	...	...
Elbows, 4-piece, 90°, 1 X Tin.....		.52	.58	.64	.76	.84	.96	1.12	1.30	1.48	1.68	1.88	2.10	2.30	2.50	2.70	2.90	3.10
Angles, 45°, 1 C Tin.....		.27	.29	.31	.35	.38	.42	.48	.51	.54	.58	.62	.68	.74	.80	.86	.92	...
Angles, 45°, 1 X Tin.....		.39	.43	.45	.48	.51	.54	.58	.62	.65	.68	.72	.76	.80	.84	.88	.92	...
Angles, 30°, 1 C Tin.....		.23	.25	.27	.29	.31	.33	.35	.37	.39	.41	.43	.45	.48	.50	.52	.54	...
Angles, 30°, 1 X Tin.....		.33	.35	.37	.39	.41	.43	.45	.47	.49	.51	.53	.55	.58	.60	.62	.64	...
Galv. Elbows, 90°, 26 Gauge.....	\$0.50	.50	.60	.70	.80	1.00	1.40	1.80	2.40	3.00	3.60	4.40	5.20	6.00	7.00	8.00	\$11.00	
Galv. Elbows, 90°, 24 Gauge.....	.60	.70	.80	.90	1.10	1.30	1.70	2.10	2.70	3.30	4.50	5.30	6.30	7.50	8.80	10.00	15.00	
Galv. Angles, 22½° and 45°, 26 Gauge.....	.30	.40	.50	.60	.80	.96	1.16	1.40	1.60	1.80	2.00	2.40	3.00	4.00	5.00	6.00	...	
Galv. Angles, 22½° and 45°, 24 Gauge.....	.40	.48	.60	.72	.96	1.16	1.40	1.68	1.92	2.20	2.40	2.88	3.60	4.80	6.00	...	...
Black Iron Elbows, 24 Gauge.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



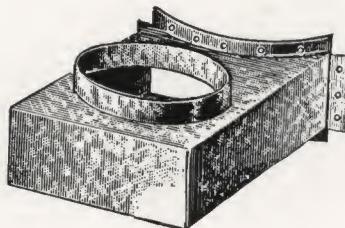
Excelsior Stove & Manufacturing Company

List Price, Galvanized Iron

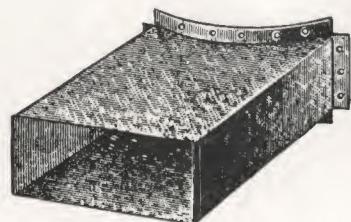
Cold Air Shoes, Square Pipe and Elbows



No. 100 Shoe



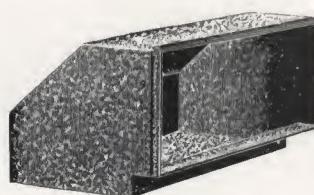
No. 200 Shoe



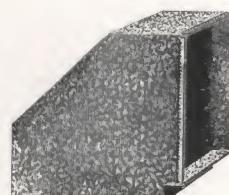
No. 300 Shoe



Square Pipe



Sq. Elbow, Style A



Sq. Elbow, Style B

Size of Shoe	Size of Collar	No. 100 Each	No. 200 Each	No. 300 Each	Size of Pipe	List per Foot	Elbows Each
11x18	14 inch	\$4.40	\$4.80	\$2.40	10x16	\$0.96	\$2.40
11x22	16 inch	4.80	5.20	2.80	12x18	1.30	3.00
12x24	18 inch	5.60	6.00	3.30	14x24	1.40	3.40
14x26	20 inch	6.40	6.90	3.60	16x26	1.60	3.80
15x28	22 inch	6.50	7.50	4.20	16x30	1.80	4.40
17x30	24 inch	6.70	8.00	5.00	16x36	2.00	4.80
18x34	26 inch	8.00	9.00	6.00	18x40	2.20	5.60
18x36	28 inch	8.50	10.20	6.50	18x32	2.40	4.80
18x42	30 inch	10.00	11.00	7.00	20x32	2.80	5.60
18x48	32 inch	11.00	12.00	9.00	24x30	3.40	7.00

When ordering Cold Air Shoes Give Cut Number and Size Furnace shoe is intended to fit.



Style A

DOUBLE TEE JOINT

Made of Galvanized Iron

Style A or B, for No. 21-44 Cycloidal Furnace, only each.....
Style A or B, for No. 24-48 Cycloidal Furnace, only each.....
Style A or B, for No. 27-51 Cycloidal Furnace, only each.....

Price List
\$.....



Style B

National Stoves, Ranges and Furnaces



The Champion Hot Water Combination Heaters

Designed to be used in our Cycloidal and Higrade Furnaces, to make them Combination Warm Air and Hot Water Heaters. This system is recommended where some of the rooms are remote from the Furnace.

The Base Section

The construction of this section permits its being placed directly at the top of the fire, in which position its large surfaces are subjected to the strongest effect of the fire, making it a powerful heater. The opening in front of Heater is placed opposite the feed door opening to permit the addition of fuel to the fire, the opening at the top of Heater allows the flame and reflection of the fire to come in contact with the surfaces of the furnace as without the application of the Heater, this section can be used alone or with one or more ring sections added as is desired.

The Ring Section

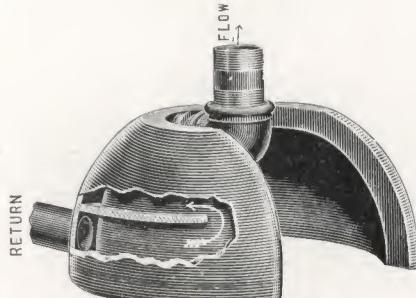
The curved surfaces on the ring of which this section is composed make it possible to expose more surface to the action of the fire than by any other construction known. One or more of these sections can be used together according to the amount of radiation to be used. The fire passing through spaces between the rings permits its direct action upon each section added, making it a powerful Heater.

The Base With Rings Added

The opening at top of base section permits the flame and reflection of the fire to come in direct contact with each ring section, one or more rings can be added to be determined by the amount of radiation to be used.

Note

The capacities of these Heaters as given in lists are fully guaranteed and persons using them are advised that it is not necessary to select a Heater of greater capacity than is recommended in lists.



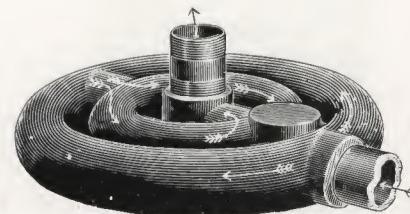
Base Section When Used Without Ring Sections.

Number of Boiler	Style of Boiler	Outside diameter of Boiler	Height in inches	Capacity in sq. ft.	Size of radiation in inches	Capacity flow and return in inches	Price
12	Base Sec.	12	6	40	1½	4	.....
14	Base Sec.	14	8½	125	1½	9	.....
17	Base Sec.	17	10	200	2	5	.....
20	Base Sec.	20	10	275	2½	10	140
23	Base Sec.	23	10	365	2½	17	125

When the heater will permit, the Base and one or more ring sections may be added, thereby increasing the radiation.

If possible always select a Heater about four inches less in diameter than the space in combustion chamber of furnace. This permits the fire to pass over outside as well as inside surfaces and gives greater capacity to Heater.

All mains and risers not covered are counted as radiation. Two collars with set screws are furnished with each Heater. Openings will be bushed to any size ordered.



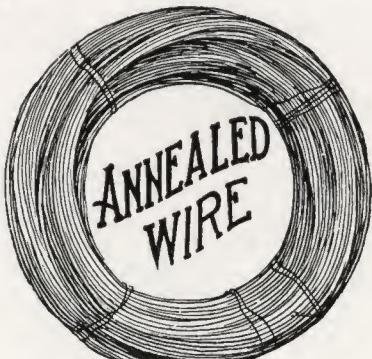
Ring Section May be Used With or Without the Base Section.

Number of Boiler	Style of Boiler Ring Section	Outside diameter of Boiler	Height in inches	Capacity in sq. ft.	Size of radiation in inches	Capacity flow and return in inches	Price
121	1 Section	12	4	40	1½	.....
122	2 Section	12	9	75	1½	.....
141	1 Section	14	5	75	1½	.....
142	2 Section	14	10	140	1½	.....
171	1 Section	17	5	125	2	.....
172	2 Section	17	10	225	2	.....
201	1 Section	20	5	175	2½	.....
202	2 Section	20	10	300	2½	.....
231	1 Section	23	5	225	2½	.....
232	2 Section	23	10	400	2½	.....

NOTE — This style Heater can be furnished tapped on edge for return as shown in cut, but will be furnished tapped top and bottom unless otherwise ordered.



Excelsior Stove & Manufacturing Company



No. 18 Gauge Wire
12 Pounds to the stone.

Per Stone each \$.....



Furnace Chain
Per 12-yard box each \$.....



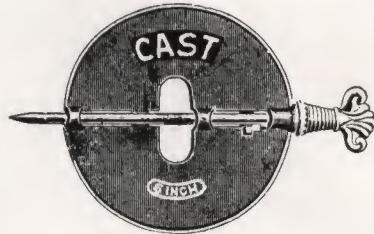
Asbestos Cement
Mixed Ready for Use

1-Pound Can	each	\$.....
2-Pound Can	each	.....
3-Pound Can	each	.....
5-Pound Can	each	.....
10-Pound Can	each	.....



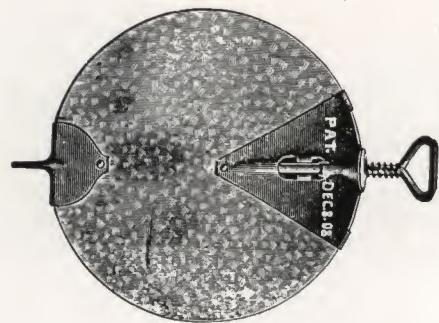
Asbestos Dry Paste
For Pasting Asbestos Paper on Furnace Pipes, Etc.
Mix With Cold Water to a Paste

2½-Pound Bag	Price	\$.....
5- Pound Bag .....	.....	.....
10- Pound Bag .....	.....	.....



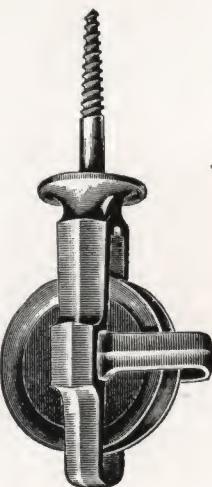
Smoke Pipe Dampers

Inches	Price
8.....	doz. \$.....
9.....	doz.
10.....	doz.
12.....	doz.
14.....	doz.
15.....	doz.
16.....	doz.



No Rivet Damper Clips

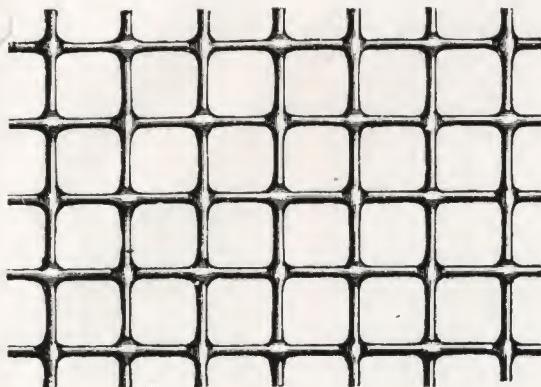
Clips without tail pieces	Price	\$.....
Clips with tail pieces	doz.



Encased Pulley

Per doz.....	Price	\$.....
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National Stoves, Ranges and Furnaces

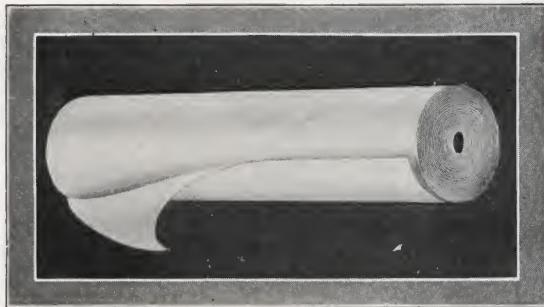


Wire Netting in Rolls

For Covering Outside Cold Air Duct
Openings

Width 30 inches

Per square foot \$.....

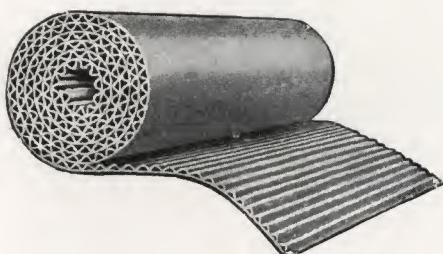


Asbestos Paper in Rolls

For Covering Furnace Pipes

Width 36 inches

$\frac{1}{2}$ inch thickness in 50-lb rolls . . . per 100 lbs. \$.....
 $\frac{1}{6}$ inch thickness in 100-lb rolls . . . per 100 lbs. \$.....



Asbestocel in Rolls

A plain and corrugated sheet of Asbestos
paper fastened together.

For covering Furnace pipes, should be wired on

Width 36 inches

Rolls contain approximately 250 square feet.
 1 ply about $\frac{1}{4}$ inch thick . . . per square foot \$.....



Globe Water Heater

Attached to any warm air furnace or steam heater, will heat water for domestic use. Its position in heater is just above the fire. No place for coal to lodge. Does not interfere in adding fuel to the fire.

No.	Diameter in Inches	Size Pipe	Capacity Gallons per Hour	Price
80	8	1 in.	40 to 50	\$.....
90	9	1 in.	50 to 60	\$.....

National Water Coil

Made to fit all sizes Cycloidal National Furnaces. Will heat ample water for domestic use.

No.	Size Pipe	Capacity Gallons per Hour	Price
4	1 in.	30-40	\$.....

When ordering state size furnace it is intended to fit.



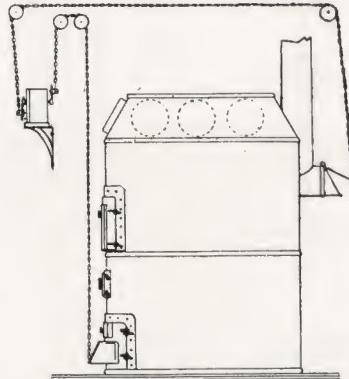


Excelsior Stove & Manufacturing Company

Minneapolis Heat Regulator No. 47G



Thermostat
As seen in Living Room



Regulator
As Attached to a Furnace or School Room Heater



Motor
Mounted in Basement

In the Model 47G we announce a simple, substantial, workable device, which is backed by the skill and experience acquired in thirty years devoted solely to the manufacture of heat regulating apparatus. This model is produced at the lowest price consistent with quality, workmanship and durability. The thermostat is accurate. The motor is of the gravity type and has ample power and from thirty to fifty per cent more actions at one winding than any other gravity motor. Our regular standard guarantee covers this model.

The thermostat, or mechanical thermometer, is attached to the wall of the living room with concealed wiring running to the basement. It is handsomely finished and is also equipped with a reliable thermometer.

The Model No. 47G is finished with a clock time attachment, which allows a lower temperature at night, and at any set hour in the morning will automatically turn the indicator to seventy degrees, thereby giving the occupants of the house a warm and comfortable home when they arise. The thermostat is small and inconspicuous and is an ornament in any room.

What The Regulator Will Do

It will keep the house at an even temperature, save coal, and prolong the life of a heater by always closing the draft before the fire gains too much headway. It will relieve the mind entirely of the care of the draft dampers. The Regulator will demonstrate that no heating plant can be efficient or complete without it. The Regulator will control equally well on hot water, steam, gas, hot air and combination heaters.

The Motor is designed to be fastened to the ceiling of the basement. It is small and compact and presents a very neat appearance, as it is enclosed in a pressed steel case, handsomely finished in black enamel (baked). After seeing this device you will at once recognize that it is far superior in mechanical construction to any other regulator on the market. All gears are of brass with steel pinions and run in finely adjusted bushed brass bearings. The frames are of pressed steel.

The power is furnished by an iron weight, which is of ample size to lift all dampers on the modern types of furnaces, and no special expensive dampers will be necessary. It is equipped with an automatic switch (patented), which leaves the drafts closed when the motor is run down. This is an important feature, as it absolutely eliminates all danger from forgetting to wind the motor and letting it run down with drafts open.

There is also a governor which regulates the speed of the motor and allows the drafts to open and close slowly and steadily, thereby avoiding the clatter and banging of dampers, so objectionable on other makes.

Price

Number

47G Regulator, complete with Clock attached.....

Weight
20
Price
\$....

National Stoves, Ranges and Furnaces



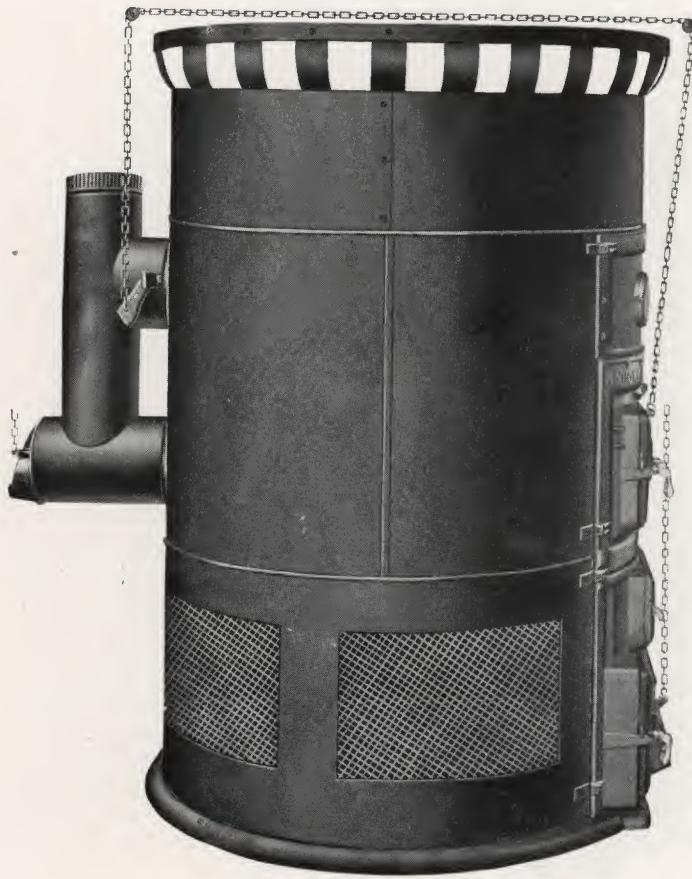
THIS TRADE-MARK has been put before the public upon thousands of our stoves, ranges, and furnaces on millions of pieces of special advertising matter, that have gone into the American homes, to say nothing of the innumerable copies of newspapers, magazines and other periodical publications, which we have used to popularize National Stoves, Ranges, and Furnaces. Our advertising, which is done persistently, and consistently, forcing our emblem upon the attention of the public, is significant that few are strangers to the National Trade-Mark. Dealers who handle the National line inherit the results of this publicity, and find it of inestimable assistance in making sales. Use our trade-mark on all your stationery and thereby share its benefits.



Excelsior Stove & Manufacturing Company

Cycloidal National Furnace Room Heater

For Soft Coal, Coke or Wood



This is our regular Cycloidal NATIONAL Furnace cased as a Room-Heater. The casing is made of Polished Blue Steel, the lower section is provided with very large panels of steel fret-work to admit the air of the room for circulation, and allow heat to escape through the fret-work, sufficient to warm a person standing close to the Heater.

The top is open for the heat to discharge in large volumes. It circulates the air of the room, warming the entire room uniformly from end to end.

Adaptable for Heating Warehouses, Depots, Stores, Churches, Auditoriums, Garages, and all Buildings where the Heater must be placed within the space to be heated, no basement being available for a Furnace.

We recommend the Heater to be placed on a two-inch thick concrete base, or on the floor covered with two thicknesses of asbestos paper and sheet iron covering.

Approved by



• TRADE MARK •

Detail

R SERIES

	21-44R	24-48R	27-51R
Number of Heater			
Diameter Top of Fire Pot	inches 21	24	27
Depth of Fire Pot to Grate	inches 13½	14½	16
Diameter of Combustion Chamber inside	inches 25½	28¾*	32
Diameter of Combustion Chamber outside over all	inches 34	37	40
Diameter of Casing	inches 44	48	51
Height Single Casing	inches 65	69	74
Height of Castings	inches 51½	55½	61
Size Feed Door opening	inches 9½x14	10¼x14	10½x14
Size Ash Door opening	inches 11x18¾	11¾x21	13½x24
Size Smoke Collar	inches 9	9	9
Size Water Coil Pipe for Range Boiler	inches 1	1	1
Size Evaporating Pan	quarts 8	8	8
Area Grate Surface	square inches 314	418	551
Area Radiating Surface	square feet 45.64	57.04	71.3
Heating Capacity	in 1,000 cubic feet 28-38	38-50	50-62
Shipping weight Heater, with Casing	lbs. 1560	1780	2100
Heater Priced with Casing and Double Tee Joint	each \$.....	\$.....	\$.....

NOTE — Special Fire Pot for Hard Coal can be furnished.

See further illustration of these Heaters on pages 193-201

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Higrade National Furnace Room Heater

R SERIES

For Soft Coal, Hard Coal, Coke or Wood



This is our regular Higrade NATIONAL Furnace cased as a Room Heater. The casing is made of Polished Blue Steel, the lower section is provided with very large panels of steel Fret-work to admit the air of the room for circulation, and allow heat to escape through the fret-work, sufficient to warm a person standing close to the Heater.

The top is open for the heat to discharge in large volumes. It circulates the air of the room, warming the entire room uniformly from end to end.

Adaptable for Heating Warehouses, Depots, Stores, Churches, Auditoriums, Garages and all Buildings where the Heater must be placed within the space to be heated, no basement being available for a Furnace

We recommend the Heater to be placed on a two-inch thick concrete base, or on the floor covered with $\frac{1}{4}$ -inch thickness of asbestos paper and sheet iron covering.

Approved by



• TRADE MARK •

Detail

	20R	22R	24R	26R	28R
Number of Heater.....					
Diameter Top of Fire Pot.....	inches 19	21 $\frac{1}{2}$	22 $\frac{1}{2}$	24	27 $\frac{1}{4}$
Depth of Fire Pot to Grate.....	inches 11	12	13	14	14
Diameter of Radiator.....	inches 29	30 $\frac{1}{2}$	32 $\frac{1}{2}$	35 $\frac{1}{2}$	37 $\frac{1}{2}$
Diameter of Casing.....	inches 38	41	44	48	52
Height Casing.....	inches 60	65	65	66	66
Size Feed Door Opening.....	inches 10 $\frac{1}{2}$ x10 $\frac{1}{2}$	12 $\frac{1}{4}$ x12 $\frac{1}{4}$	13x14	13x14 $\frac{1}{2}$	13x14 $\frac{1}{2}$
Size Ash Door Opening.....	inches 10 $\frac{1}{2}$ x16	10 $\frac{1}{2}$ x16 $\frac{3}{4}$	11 $\frac{1}{2}$ x18 $\frac{1}{2}$	12x20 $\frac{1}{4}$	12x20 $\frac{1}{4}$
Size Smoke Collar.....	inches 8	8	8	9	9
Size Water Coil Pipe for Range Boiler.....	inches 1	1	1	1	1
Size Evaporating Pan.....	quarts 8	10	10	10	10
Heating Capacity, 1000 cu. ft.....	15-20	20-28	28-38	38-50	42-58
Shipping Weight.....	975	1150	1325	1425	1525
Priced with Casing.....	\$.....	\$.....	\$.....	\$.....	\$.....

Can be furnished with Wood Burning Grate if desired. See further description of the Heaters, pages 203-209.

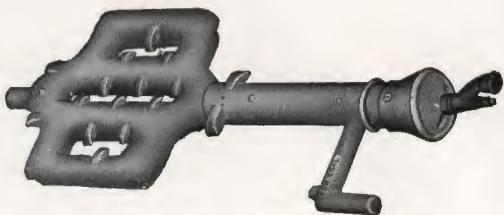
NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

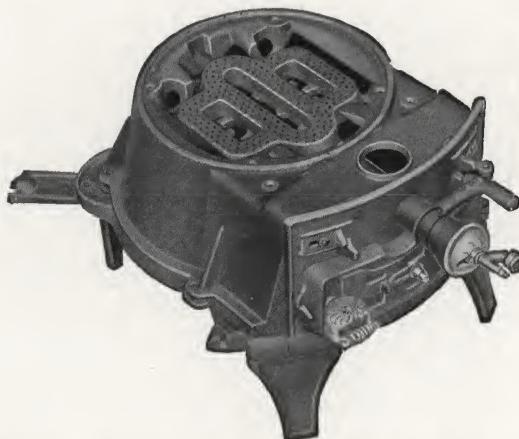


Gas Side



Coal Side

Combination Coal and Gas Grate furnished for all sizes National Air Heaters. The Grate pivots on the exact center, one side up uses coal, the other side gas, merely turning it over changes it from one fuel to the other. When using gas, the fire pot should be filled with artificial fuel for the best results.



Showing Combination Coal and Gas Grate Attached
For Styles A-G and Texas National Air Heaters

Price of Combination Grate instead of Regular Coal Grate.

Add to Price on Heaters	Price
Size 16-28 inch.....	\$.....
Size 18-30 inch.....	\$.....
Size 20-32 inch.....	\$.....

Needle Point Valve and Air Mixer included in above price.

National Stoves and Ranges
Were Awarded
the Highest Prize, Gold Medal,
World's Fair, 1904

National Stoves, Ranges and Furnaces



National Room Air Heater

STYLE "A" AND "G" SERIES

Style "A" used where no ventilation is required. Style "G" used where ventilation is required.

For Hard Coal, Soft Coal or Wood

This heater is designed especially to provide all the requirements for perfection in heating and ventilating school rooms, churches, auditoriums, etc., and to provide an apparatus that will obtain all the heat units from the fuel consumed, in a convenient and sanitary manner.

The necessity for properly heating and ventilating school rooms is too generally known to require a lengthy argument here. It has been recognized to the extent that a great number of books have been written on the subject, pointing out the necessity for properly heating and ventilating buildings in which large numbers of people are housed. Many states have passed laws making it compulsory to educate our children under sane and sanitary conditions, which means that certain methods must be complied with to effectually prevent contagious and other ills due to the breathing of impure air.

An apparatus, therefore, to perform the necessary functions, must provide:

1st—Fresh Air to be admitted in a sufficient volume that will supply 1,800 cubic feet of fresh air per hour for each pupil in school rooms.

2nd—Ventilation.—An outlet for the cold and foul air that will change the air inside the room 4 to 6 times per hour.

3rd—Circulation of the inside air to the end that the school room will be heated uniformly even to the remotest corners.

4th—Protection by a complete casing of the heating apparatus that will permit pupils to sit in close proximity to the heater without being uncomfortable.

5th—Cleanliness.—A heater provided with large and convenient feed doors, to prevent spilling the fuel over the floor, also an ash pan which permits the removal of ashes without the cloud of dust always present when shoveling out the ashes.

The above are the qualifications necessary as prescribed by the state legislatures. The questions of apparatus not covered by law and equally important to the school board, namely: to obtain a heater that will heat up to the requirements, that will be durable and not necessitate constant repairing, that will be economical in fuel consumption, moderate in price and easily operated, should be given full and careful consideration.

The National Room Air Heater

satisfactorily meets all the above points, and may be better judged from its structural features.

Fuel Economy

The National Room Air Heater is built with special attention toward economy and perfect combustion of the fuel. This is accomplished in the arrangement of the draft inlet. The draft being admitted through the ash door in part, passes up through the grate; at the same time a portion of the draft rises up through a tube from the base into the blast ring at the top of the fire pot.

Perfect Combustion

Perfect combustion of the fuel consists in the consumption of both the fixed carbon (coke) and the hydro-carbon (gases), which constitute the B. T. U. of the fuel available if supplied with the proper supply of oxygen (air) to the fuel while in a state of combustion. The draft through the grate forces the gases out of the fuel. The air from the blast ring makes these gases combustible, which are thoroughly consumed, leaving no black smoke or soot to pass out of the chimney, since black smoke is the manifestation of imperfect combustion.

Grates

The coal grates consist of four triangular bars, coupled together in pairs with cog wheels. These grate bars can be revolved with a grate shaker through the damper opening in the ash pit door. By an ingenious construction, the grate shaker cannot be removed without leaving all the grate bars in a proper position. All the bars of the grate have three surfaces exactly alike, therefore either of the surfaces exposed to the fire is proper. After shaking the grate a changed relation of the grate to the fire will occur, which equalizes the wear and makes the grate practically indestructible. The grates are removable through the ash pit door, without taking the heater apart or removing a single bolt. We furnish a complete wood grate instead of the coal grate when wood exclusively is to be used.

Fire Pot

The fire pot is corrugated and made very heavy. The sides are nearly straight and prevent the fire or ashes from resting on the pot, which adds many years to its durability.

Blast Ring

The blast ring is made in eight sections of heavy cast iron. These sections are loose and self-supporting, ample space for expansion is allowed, and are easily replaced. They also serve to prevent the coal coming into contact with the body. The functions of the blast ring are fully described under the caption of Perfect Combustion.



Excelsior Stove & Manufacturing Company

Body

The body of the National Room Air Heater is made of Cast Iron, square-ribbed heavy construction and is proportioned in its relation to the fire-pot which provides the correct amount of radiation and combustion chamber. Analyzed gray iron is the only metal that will withstand the strain of soft coal and is the most durable.

Feed Doors

The feed doors are double; the lower door is intended for coal, while both doors may be opened to conveniently feed rough wood, or extra large chunks of coal.

Check Damper

The check damper is located in the smoke pipe. It is regulated with a ratchet bar and serves to control the fire. By its use the fire may be regulated to an even degree of heat, and since this damper is open most of the time, it adds materially toward ventilation of the room.

Water Pan

Each heater is provided with a water pan, arranged into the casing with an outside swing cover for convenience in refilling. Water should be kept in the pan at all times. The evaporation being automatically regulated by the heat, the air absorbs the exact amount of moisture required to keep it in a healthful condition.

Casings

These are made of sheet metal, coated with an anti-rust dull black finish and thoroughly asbestos lined, with corrugated tin lining inside to protect the asbestos, making a 3-wall casing, solid wrought iron casing rings, that insure rigid construction. To mount the casings onto the heater, remove all door frames, bolt the bottom ring into place, then put on lower section of casing, then the solid ring and next the upper casing. Bolt on the door frames the very last. Made so simple, anyone can set up the heater complete with no more tools than an ordinary screwdriver.

Air Circulation

The air space between the heater and casing, also the space between the heater and floor, are properly proportioned to circulate the air of the room without creating an unpleasant draft. All the air of the room except foul air is circulated and passes through the heater. This circulation draws the air from the remotest corners of the room toward the heater and is replaced by warm air, insuring an even temperature throughout the entire room.

Circulation being perfect does not require the heater to be placed in the center of the room; it may be placed in an out-of-the-way corner with equal success, thereby not interfering with clear space in the room.

Foul air being heavier than pure air remains close to the floor; it does not circulate through the room again and again, if there is an opening for its escape to the open air; therefore the necessity for the ventilating shafts to originate at the floor line.

Chimney

The chimney flue for the National Air Heater should be not less than 8x8 inches inside, and the smokepipe from the heater to the chimney should be 8 inches. The ventilating flue should be of a size required by the various states.

Architects when designing new school buildings usually provide a special chimney which is surrounded by a ventilating stack permitting every room to be connected to the ventilating stack.

Old buildings not provided with ventilating systems may be successfully ventilated by either of the ventilating systems shown in this book in connection with the National Air Heater.

Simplicity

The National Air Heater has been designed especially for simplicity in all its features. Any person with ordinary intelligence can install the heater and any of the ventilating systems without the aid of any special agent. We have eliminated all the mysteries from the apparatus and the usual charges made for same; therefore our prices are below the so-called special houses and special heating engineers, since anyone can install the National, reference being had to the illustrations shown in this book.

In general the National Room Air Heater is the last word in the creation of a school room heater. There are other heaters that will heat a room, but there are none with the refinements and structural features that insure the increased radiation, the durability, convenience, cleanliness and fuel economy that go with every National.

The National is made in three sizes, capable of rendering the service as listed. If the space is larger than can be heated with one heater, we would strongly recommend that two heaters should be used instead of one over-size apparatus. The special advantage in using two heaters in a very large space consists in the fact that during the Spring or Fall season, or during moderate weather, one heater only may be put into use, thereby saving fuel, then in very cold weather both heaters may be fired, which produces a better distribution of the heat than can be obtained from one apparatus.

National Stoves, Ranges and Furnaces



THE following pages illustrate our complete line of Room Heaters.

These are especially made to heat School Rooms, Churches, Garages, Warehouses, Stores, Depots, Auditoriums, etc.

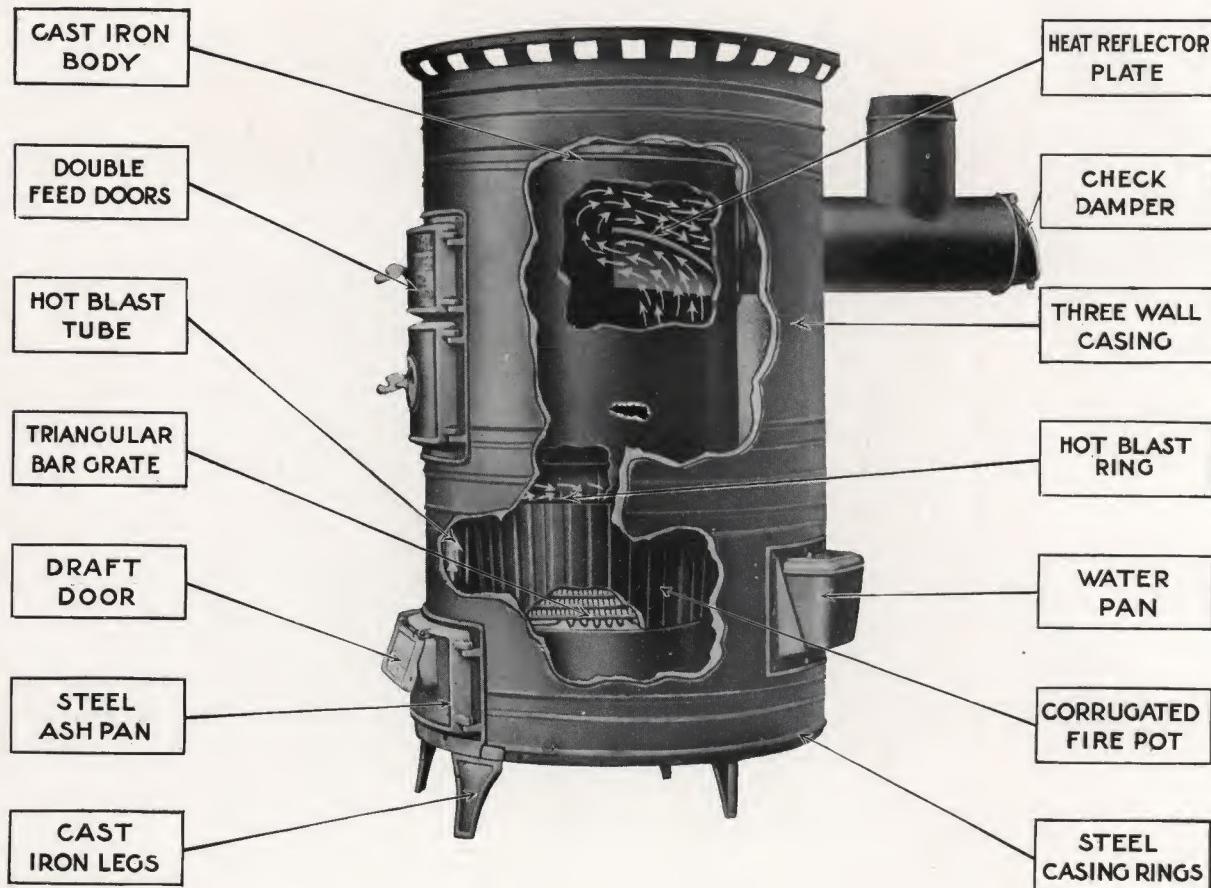
These heaters are made to circulate the air of the room, which is the only possible method of heating very large space.

A careful perusal of the following pages will show a heater that will meet your requirements.

If in doubt, send us detail of building, we can solve your problem.



Excelsior Stove & Manufacturing Company



National Room Air Heater

Showing 14 Superior Points of Construction

Thousands in successful operation

Meets the requirements of State School Laws for
heating and ventilating school rooms

NATIONAL FURNACES THE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Sectional view showing direction of draft through the heater. The air of the room circulates between the Heater and casing, entering under the bottom of casing and passing out of the top.

Style "A" National Room Air Heater

For Hard Coal, Soft Coal, Coke or Wood.

Specifications

	16-28A	18-30A	20-32A
Number.....	inches	16	18
Diameter Top of Fire Pot.....	inches	19½	21½
Diameter of Body.....	inches	28	30
Diameter of Casing.....	inches	60½	60½
Height of Casing.....	inches	49½	51
Height from floor to top of Smoke Tee.....	inches	7	8
Size Smoke Pipe.....	inches	9x16½	11x16½
Size Feed Door.....	inches	9000	13000
Heating capacity in cubic feet.....	pounds	400	500
Shipping weight.....			565

Description pages 248-253 Prices (see net price list)

Style A for Coal, with Casing and Tee Joint.....	\$.....	\$.....	\$.....
Style A for Wood, with Casing and Tee Joint.....	.....	.....	.....
Style A for Coal and Wood with Casing and Tee Joint.....	.....	.....	.....

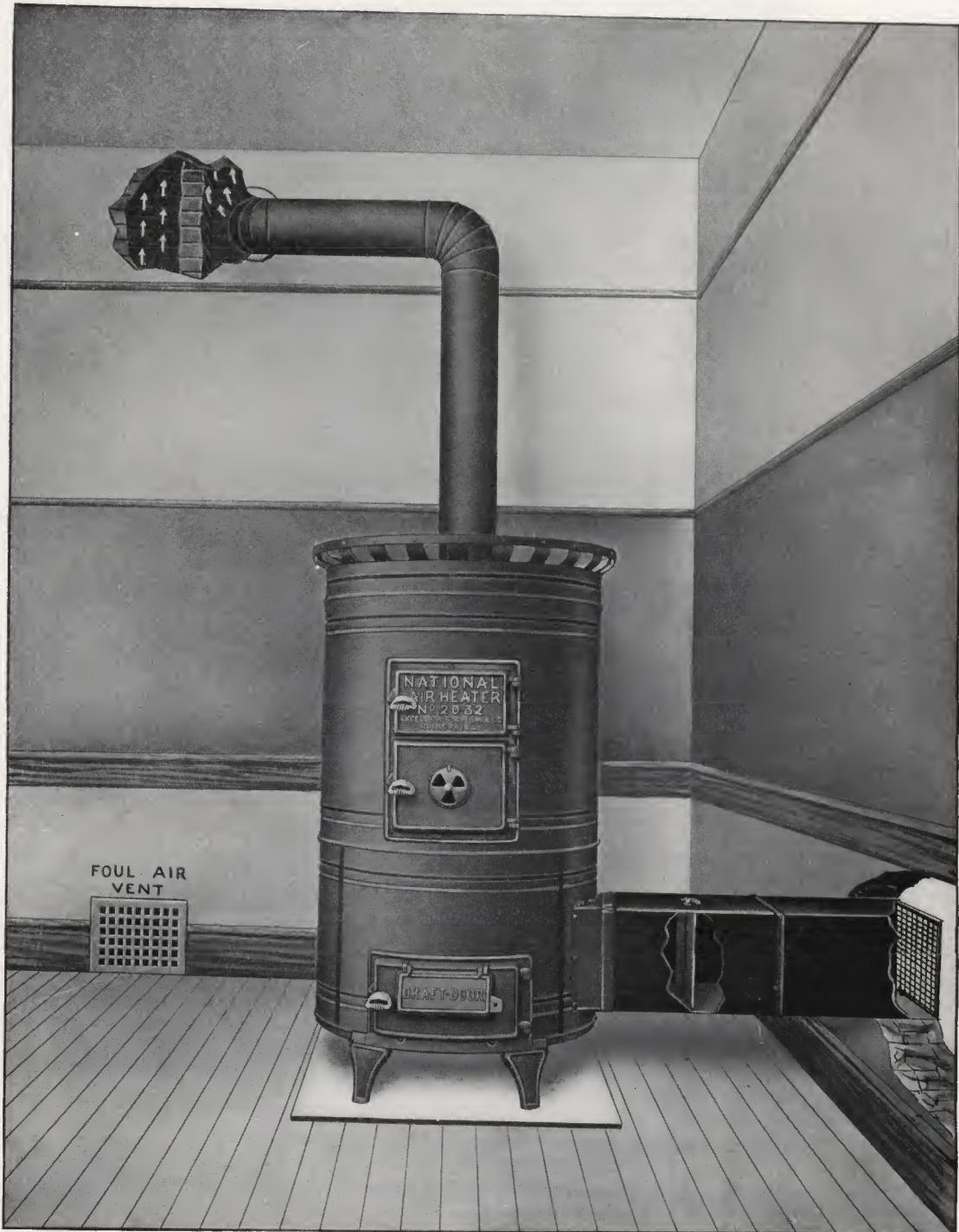
Can furnish a special grate for burning Natural Gas if desired. See page 248

NOTE — This Heater has no provision for fresh air intake from the outside. It is intended for Stores, Churches, Garages, etc., where recirculation of air is required.

For this Heater with fresh air intake from outside see Style "G" illustrated on following pages.



Excelsior Stove & Manufacturing Company



Style "G" National School Room Air Heater

For Hard Coal, Soft Coal or Wood.

Interior view of this Heater same as Style "A", Page 253.

See description, pages 248-253 (Prices see Net Price List)

Can furnish a special grate for burning Natural Gas if desired, see page 248

National Stoves, Ranges and Furnaces



Style "G" National School Room Air Heater

This Heater is made to cover the requirements of all State Laws pertaining to the Heating and Ventilating of School Rooms (except the State of Texas which requires special equipment and is shown on the following pages):

The installation is shown complete on opposite page. The lower section of the casing is made in four sections which permits the Fresh Air-intake Duct to be used from either side or the rear. Ventilation of the school room, is effected by the use of a chimney having two flues, one to be used for smoke, the other for the removal of Foul Air, for this purpose a Register is to be placed at the floor line and connected to the ventilating flue.

Specifications

STYLE G

Number.....	16-28G	18-30G	20-32G
Diameter Top of Fire Pot.....inches	16	18	20
Diameter of Body.....inches	19½	21½	23½
Diameter of Casing.....inches	28	30	32
Height of Casing.....inches	60½	60½	62½
Height from floor to top of Smoke Tee.....inches	49½	51	52
Size Smoke Pipe.....inches	7	8	8
Size Feed Door.....inches	9x16½	11x16½	11x16½
Heating capacity in cubic feet with ventilation.....	8000	11000	14000
Heating capacity in cubic feet without ventilation.....	9000	13000	16000
Shipping weight without equipment.....pounds	400	500	565

Prices

(See Net Price List)

Style G for Coal,	with Casing and Tee Joint	\$.....	\$.....	\$.....
Style G for Wood,	with Casing and Tee Joint	.....	.....	.....
Style G for Coal and Wood	with Casing and Tee Joint

Natural Gas Grate, see page 248.

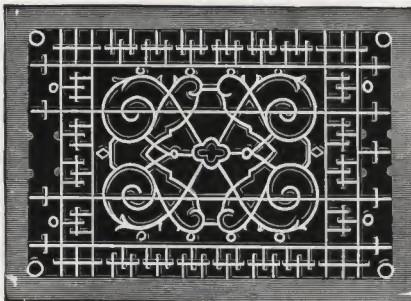
For prices on equipment, see pages 256-257.

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Excelsior Stove & Manufacturing Company

Equipment for Style "G" National Room Air Heater



Registers—Black Japanned
For Foul Air Ventilating Flue

Made of cast iron with valves.

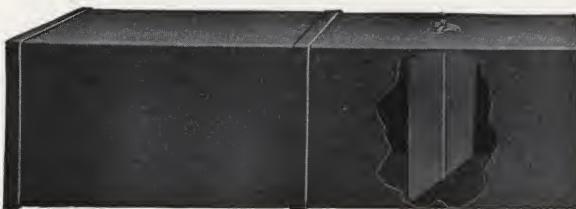
Size.....	.....inches	9x12	12x16	12x20	14x20
Price.....	.....each	\$.....	\$.....	\$.....	\$.....



No. 9 Stove Board

These Stove Boards are made of heavy lumber and covered with galvanized iron, size 33x39-inch, large enough for all size Heaters.

No. 9—Stove Board.....each	\$.....
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No. 25 Fresh Air Duct for Style "G" Heater

This Fresh Air Duct is arranged with a solid damper, operated by a Quadrant that enables the operator to fasten the damper in an open, closed or intermediate position. It is made of Sheet Steel and with our double folded Joints is very easily installed.

Size $14\frac{1}{2} \times 18$ inches, 4 feet long including damper.....	.....each	\$.....
14 $\frac{1}{2}$ x18 inch Pipe to increase length if desired.....	.....per foot	

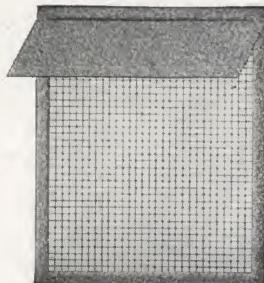
NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces

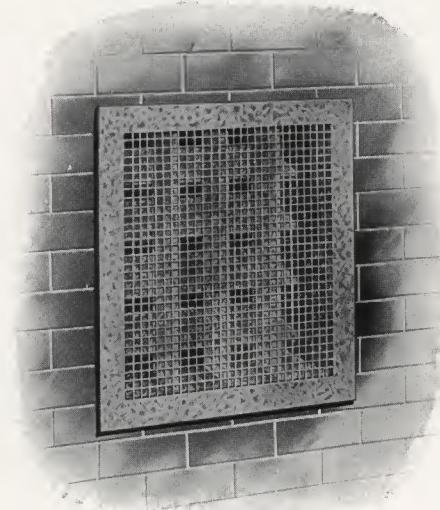


Fresh Air Intake Register and Fresh Air Screen

Are designed to cover the end of the fresh air duct to prevent foreign matter from entering the air duct.



Fresh Air Screen



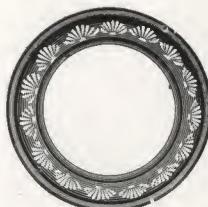
Made of Galvanized Iron wire screen and edges.
No. 3 Size 14½x18 in.....each \$....

Fresh Air Intake Register

Made of Galvanized Iron with Rain Guards and vertical slats to force the air into the duct.
No. 5 Size 14½x18 in.....each \$....

Pipe Collars

Plain Pattern



Inches.....	7	8
Each.....	\$....	\$....

Chimney Thimbles

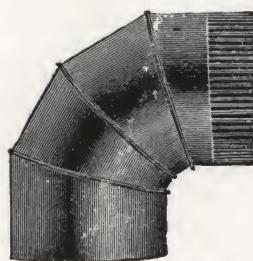
Inches.....	7	8
Each.....	\$....	\$....



Smoke Pipe Nested

24 Gauge Black Iron

Inches.....	7	8
Per Joint.....	\$....	\$....



Smoke Pipe Adjustable Elbow

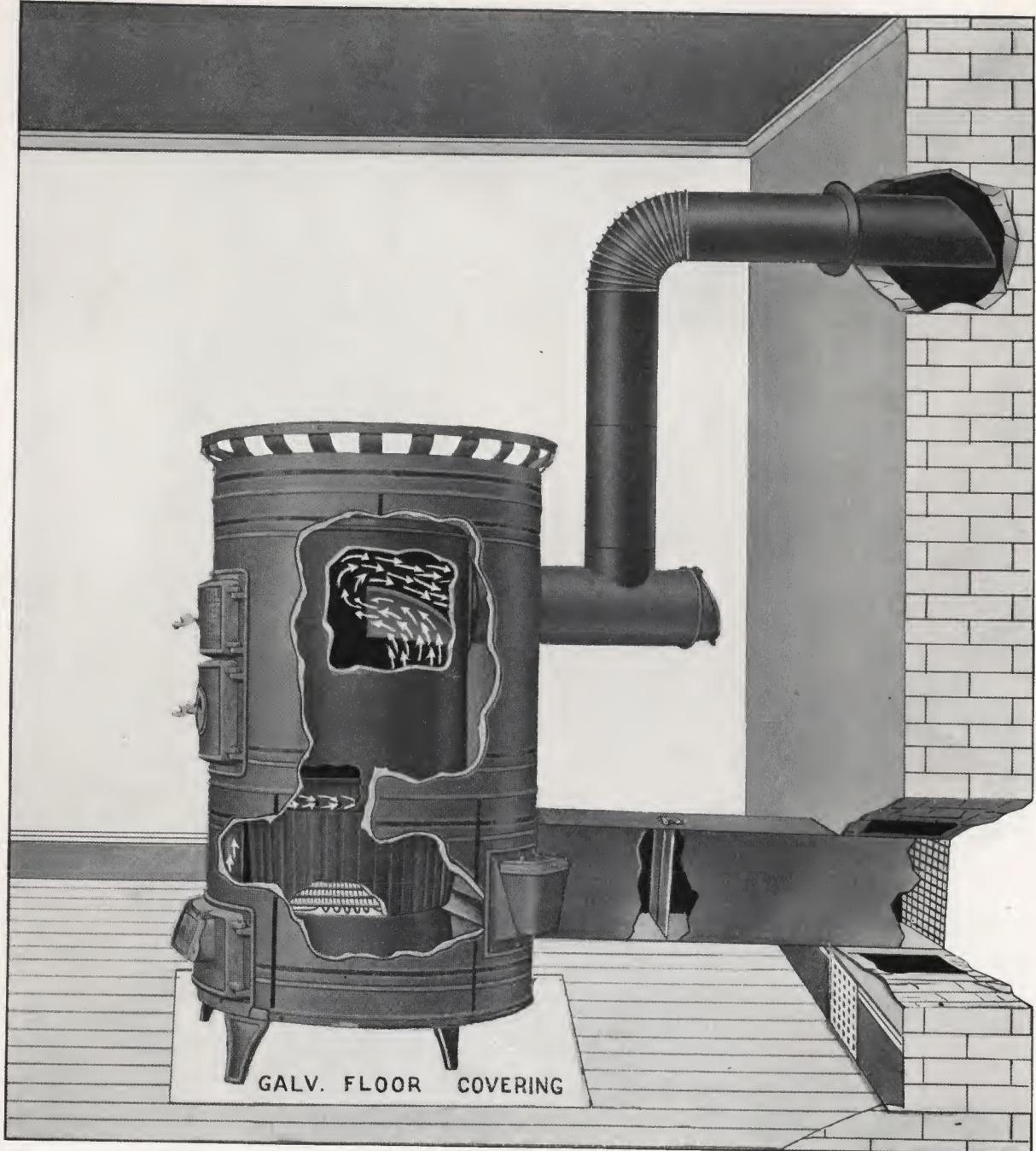
24 Gauge Black Iron

Inches.....	7	8
Each.....	\$....	\$....

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Excelsior Stove & Manufacturing Company



Style "T" Texas National School Room Air Heater

For Hard Coal, Soft Coal or Wood

As approved by the State Superintendent of Schools, Austin, Texas
Published in the School Bulletin of Approved Heaters

Description page 248-253 and 258-260

Can furnish special grate for burning Natural Gas if desired. See page 248

National Stoves, Ranges and Furnaces



Style "T" Texas National School Room Air Heater

In the illustration on opposite page the chimney is cut away, to show the arrangement of the fresh air duct when attached to the rear of Heater. The lower section of the casing is made in four parts which permits placing the fresh air duct on either side or rear, as the conditions may require. One of the four pieces contains the Waterpan which may also be placed in most convenient location.

The fresh air duct is provided with a solid damper operated by a Quadrant that permits locking the damper in any position. A galvanized wire screen on outside of air duct with a rain guard attached prevents rain and debris entering the duct. A baffle plate on inside bottom of air duct extends inside the casing toward the fire pot and prevents the cold air falling to the floor.

The Foul air register is shown in bottom of chimney at the floor line; this register is provided with valves to close off the circulation when desired.

The smoke pipe is furnished with a mitre end for inside the chimney which facilitates the draft.

The check damper on end of smoke pipe Tee is a very important part of the Heater,—it enables the operator to hold the fire under perfect control and provides the means for retaining the fire from one day to the next.

The Body of the Heater is made of Cast Iron.

The Casing is made of Polished Steel and coated with a bronze colored lacquer; it is thoroughly lined with asbestos sheathing and steel inner lining that lays close

against the asbestos and prevents the asbestos from crumbling out.

Solid Steel Casing rings makes the casing strong and rigid. The crown is provided with loops to permit bolting it to the upper casing.

TEXAS NATIONAL Air Heater grate is made of Triangular bars which is the only form of grate construction that breaks up the clinker completely. The grate can be renewed without taking the heater apart or removing a single bolt.

The Hot Blast Ring above the fire pot is supplied with air from the ash pit, through the tube in front of the fire pot. This tube delivers air to the surface of the fire, making the gases combustible; therefore, the TEXAS NATIONAL Air Heater burns the smoke and soot natural to the use of soft coal.

Black smoke from the chimney is a manifestation of imperfect combustion.

Every TEXAS NATIONAL Air Heater is provided with an ash pan, which prevents the cloud of dust always present when removing ashes with a shovel.

The TEXAS NATIONAL Air Heater is made so simple that anyone can install it, as easily as setting up an ordinary stove.

There are other Heaters that will heat a room, but there are none that have the convenience, refinements and durability of the TEXAS NATIONAL. Thousands in use.

Specifications

STYLE T

	16-28T	18-30T	20-32T
Number	inches	16	18
Diameter Top of Fire Pot	inches	19½	21½
Diameter of Body	inches	28	30
Diameter of Casing	inches	60½	60½
Height of Casing	inches	49½	51
Height from floor to top of Smoke Tee	inches	7	8
Size Smoke Pipe	inches	9x16½	11x16½
Size Feed Door		8000	11000
Heating capacity in cubic feet with ventilation		9000	13000
Heating capacity in cubic feet without ventilation	pounds	480	575
Shipping weight with full equipment			650

Prices

(See Net Price List)

Style T for Coal, with complete equipment	\$	\$	\$
Style T for Wood, with complete equipment			
Style T for Coal or Wood, with complete equipment			

Natural Gas Grate (See page 248) extra

Price of Texas National School Room Air Heater includes the following list of Equipment (See page 260).

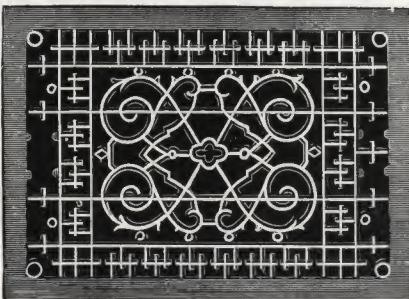
- 1 only 4-foot length Fresh Air Duct with Damper.
- 1 only Screen for Fresh Air Duct.
- 1 only B. J. Register for Foul Air Ventilating Stack.
- 1 Sheet 36x42 inches Galvanized Iron for floor covering.
- 6 feet 24 gauge Black Iron Smoke Pipe Nested.
- 1 only Mitre end for Smoke Pipe.
- 1 only 24 gauge Black Iron Adjustable Smoke Pipe Elbow.
- 1 only Smoke Pipe Collar.



Excelsior Stove & Manufacturing Company

Equipment for Style "T" Texas National School Room Air Heater

The following prices apply if ordered separately from Heater



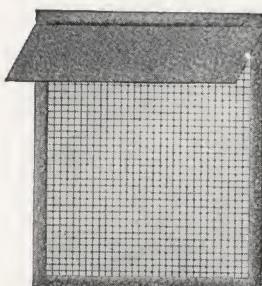
Register Black Japanned

Size 12x16, for No. 16-28 and 18-30..... each \$.....
Size 12x20, for 20-32, each



Galv. Iron Floor Covering

Size Sheet 36x42.....each \$



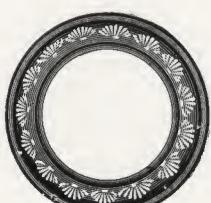
Fresh Air Screen

Size 12x12, for No. 16-28 and 18-30.....each \$....
Size 12x16, for No. 20-32.....each



Texas Air Duct

Size 12x12x4 ft. for No. 16-28 and 18-30..each \$....
Size 12x16x4 ft. for No. 20-32,each



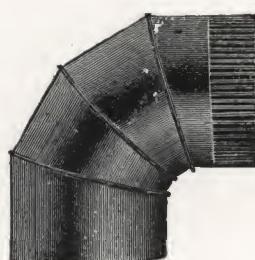
Stove Pipe Collar (Plain pattern)

Size 7 inch, for No. 16-28..... each \$.
Size 8 inch, for No. 18-30 and 20-32..... each



Stove Pipe Mitre 24 gauge Black Iron

Size 7 inch, for No. 16-28 each \$.
Size 8 inch, for No. 18-30 and 20-32 . . . each



Smoke Pipe Adjustable Elbow 24 gauge Black Iron

Size 7 inch for No. 16-28.....each \$....
Size 8 inch for No. 18-30 and 20-32.....each \$....

NATIONAL FURNACES ARE GREAT FUEL SAVERS



National Stoves, Ranges and Furnaces

Ventilating Stack

This cut shows the complete ventilating stack for our No. 1 System as it appears in the room.

The Vent Drum surrounds the smoke pipe, the heat from the smoke pipe within the drum warms the air, causing a draft that removes the cold and foul air out through the roof.

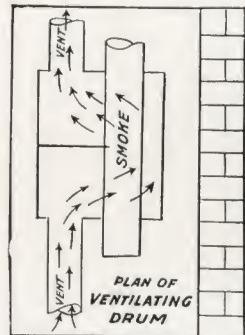
To complete this ventilating system requires that the 10-inch pipe be extended from the vent drum through the ceiling, attic and roof, terminating into our 10-inch Roof Saddle and 10-inch Ventilating Cap.



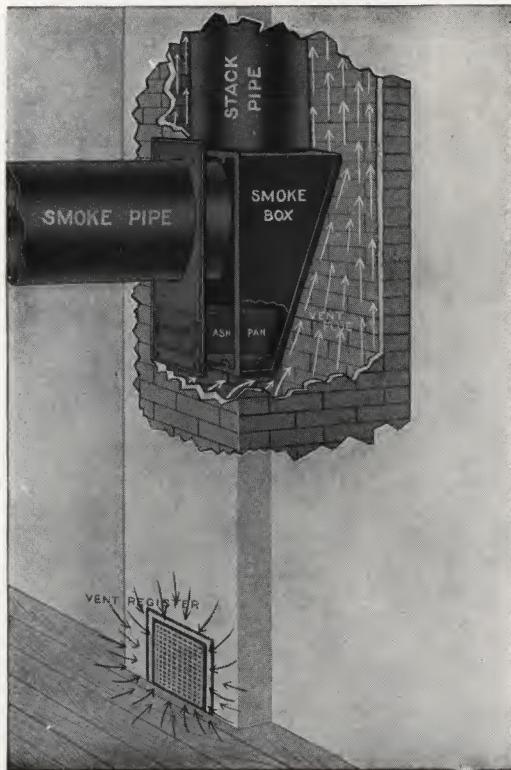
This cut shows the interior of the Ventilating Drum. Note the partition in the drum that deflects the air around the smoke pipe, thereby heating it, which creates a rapid flow of air through the vent stack.

74-inch Section Vent Stack, size 10 inch, with Vent Drum, Damper and base. Each list
10-inch Blue Steel Pipe, per foot.

NOTE—We quote the 10-inch pipe separately, since we cannot know the height required to extend from the Vent Drum through the roof.



Ventilating System No. 5



Combination Smoke and Ventilating Flue
Detail of Construction

This shows an especially good arrangement for School-Room Ventilation consisting of a brick stack, the inside opening being not less than the size specified by your state law. The smoke box is made of cast iron with cast iron wall plate and opening to remove the ash pan.

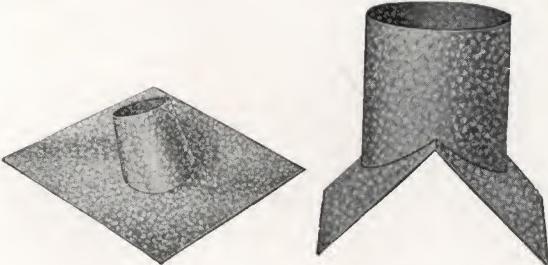
The wall plate is bolted to the smoke box which clamps them both permanently to the wall of the stack.

The stack pipe rests upon the smoke box and should be extended to the top of the vent stack. The heat from the stack pipe rarefies the air in the stack and creates a draft that draws the cold and foul air out of the room through the register placed in the stack at the floor line. All the rooms of a school may be ventilated into one stack of proper size.

Price

Smoke box, wall plate and ash pan.....	.....
9-inch 20 gauge galvanized stack pipe, per foot.....	.....
Pipe clamps to fasten stack pipe into brick, each.....	.....

Ventilating Stack
No. 1 System



Roof Saddles

These Roof Saddles are made of galvanized iron and are intended for use with our No. 1 Ventilating Systems.

Size 10 inch, for side or top. Price each
.....



Ventilating Caps

These Ventilating Caps are made of galvanized iron and are intended for use with our No. 1 Ventilating Systems.

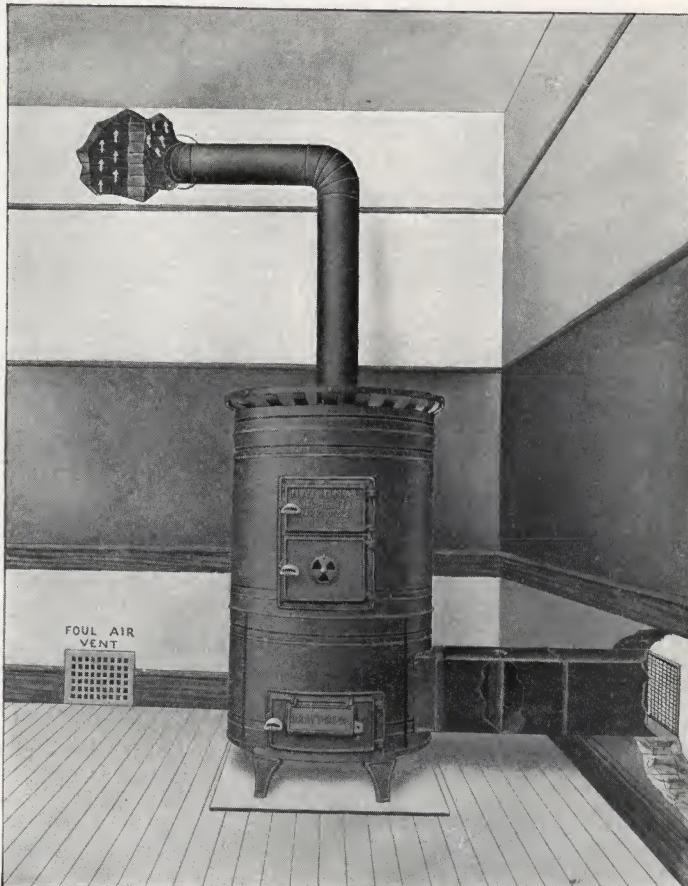
Size 10 inch. Price each.

Size 10 Inches



Excelsior Stove & Manufacturing Company

No. 0 National Ventilating System



This system of ventilation can be used when the chimney has two flues, one flue to be used for the smoke pipe, the other flue for ventilation. The smoke flue heats the brick partition wall between the flues, which in turn warms the air in the ventilating flue and causes an upward flow of air, which removes the cold and foul air out of the room.

The fresh air supply can be taken from outside, using the Number 25 Fresh Air Duct, an opening to be made through the outside wall and covered with our Fresh Air intake register.

The ventilating register to be placed as near the floor as possible, cut opening into the chimney and fasten the register to the plastering, using for that purpose "Plaster Paris" made to a paste. This method fastens the register permanently and air-tight against the wall.

Materials for Ventilating System No. 0

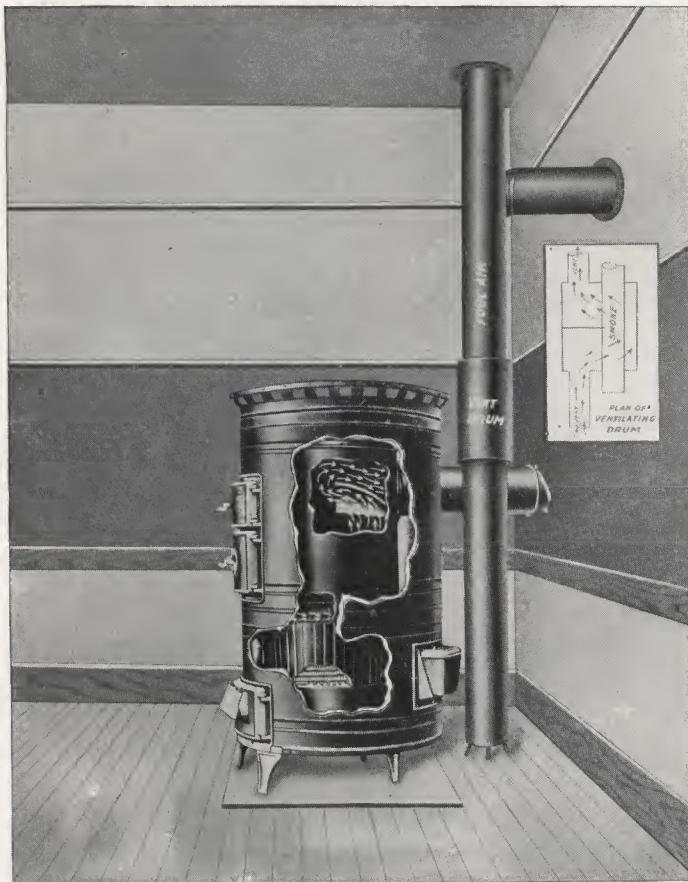
Stove Board, 9x12-inch Black Japanned Register for side wall, No. 25 Fresh Air Duct, No. 3 Screen or No. 5 Fresh Air intake register.

NATIONAL FURNACES ARE GREAT FUEL SAVERS



National Stoves, Ranges and Furnaces

No. 1 National Ventilating System



Fresh Air Supply Same as Ventilating System No. 0

This system of ventilation is to be used where a special chimney flue is not available for ventilating purposes. It consists of a ten-inch round sheet iron ventilating stack leading from the floor to the circulating drum and placed around the smoke pipe. A pipe should then be attached from the drum through the ceiling and left to discharge into the attic from which the cold and foul air is discharged into the open air through the "Pent House" on the roof. The circulating drum is arranged to retain heat from the smoke pipe and at the same time forces the circulated air against the smoke pipe, thereby heating the air and causes an upward flow to the top.

In cases where the school building does not have a "Pent House" on the roof, the ventilation pipe must be carried up through the attic and roof to the outdoor air. For this purpose it will be necessary to provide a roof saddle and ventilating cap to prevent leakage.

Materials for Ventilating System No. 1

- Stove Board.
- Drum with pipe to floor, 74-inch section.
- 10-inch Blue Steel Pipe, through the roof.
- 10-inch Galvanized Roof Saddle.
- 10-inch Galvanized Ventilating Cap.
- 10-inch Tin Ceiling Pipe Collar.
- No. 25 Fresh Air Duct.
- No. 3 Screen or No. 5 Fresh Air intake register.

NATIONAL FURNACES ALWAYS SATISFY



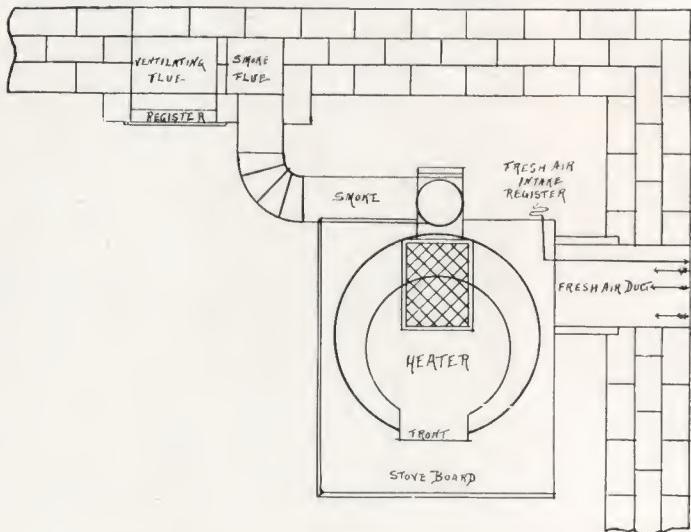
Excelsior Stove & Manufacturing Company

Floor Plan for Installing National Air Heater

Also detail for the assembling of the Heater and Casings



As Received from Factory—
Made so Strong That Railroads Cannot Damage It



Floor Plan for Installing Our Style G Heater



1st—Remove All Doors and
Frames and Put on the
Legs and Lower
Casing Ring



2nd—Put on Lower Casing
and Casing Ring, Then
Ash Door Frame
and Door



3rd—Put on Upper Casing,
Then Feed Door Frame
and Doors, Next Top
Casing Ring and Crown

NATIONALS ARE EASY TO ASSEMBLE

National Stoves, Ranges and Furnaces



Movie Fans Keep Warm With Cycloidal National Furnace

National Pipe or Pipeless Furnaces Are Easily Installed

Macomb, Ill.

Excelsior Stove & Mfg. Co.,
Quincy, Ill.

Gentlemen:

I am selling both styles of your furnaces, and can install them in one half the time I can other makes. All parts are fitted perfectly, and all parts properly ground, which makes installing easy. As for heat, weight, lasting qualities and fuel savers, they cannot be equalled.

Very truly yours,

P. A. KENNEDY.

Stronghurst, Ill.

I am pleased to state that I have been using one of your Furnaces — the Cycloidal NATIONAL for about ninety days with entire satisfaction. It has a 24-inch firepot and considerable capacity to heat,—it does the work to my entire satisfaction in every way. I am pleased to recommend it to any one wishing to install.

The LYRIC THEATER.

Excelsior Stove & Mfg. Co.,
Quincy, Ill.

Gentlemen:

The 21-44A Cycloidal NATIONAL Furnace installed in my residence during 1916 is giving utmost satisfaction and I am highly pleased with the results obtained. It is economical in the use of fuel, easy to operate and I can very easily heat my five-room bungalow in zero weather with a moderate amount of fuel.

After five seasons' use, the furnace is in excellent shape — in fact, I have never replaced any of the parts. I would not hesitate to recommend it as being the best Furnace obtainable.

Yours very truly,

HERMAN F. MESTER.



This Modern Bungalow Heated with a National Furnace
with a Small Amount of Fuel
Quincy, Ill.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



This Beautiful Missouri Church Heated With a Cycloidal National Furnace. One Hot Air Register Off of Top With Two Cold Air Intakes

Heats 7 Rooms, 1 Hall

Quincy, Ill.

Excelsior Stove & Mfg. Co.,
Quincy, Ill.

Gentlemen:

We recently had one of your Cycloidal NATIONAL Furnaces installed in our new home and we like it very much. We are heating seven rooms and a hall, all of which are being heated with a small amount of fuel. I consider it a fuel saver as well as a splendid heater.

Respectfully yours,

JESSIE LIEBIG.

Excelsior Stove & Mfg. Co.,

Prairie City, Ill.

Gentlemen:

I have been selling Cycloidal NATIONAL and Higrade furnaces ever since they were made and every one I have sold is giving excellent satisfaction. Have no trouble in convincing people they are the best Furnaces made.

Yours truly,

R. H. CHAMBERS.

Monroe City, Mo.

This is to certify that we have installed in our office a Cycloidal NATIONAL Furnace and that the same has proven entirely satisfactory. We would recommend such Furnace to anyone desiring a Heating Plant.

MERIWETHER & MERIWETHER.



Heats This Office Building Satisfactory

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Heats 10 Rooms
This Beautiful Nebraska Home Heated With a
Cycloidal National Furnace

Madison, Mo.

In giving you my endorsement of your Cycloidal NATIONAL Furnace, I do this most heartily. When your agent called on me to look my house over he said he would heat every room most comfortable and with less fuel than we were using in our stoves. Our house has been like summer-time all winter, and everything about this Furnace is more than true.

We are very much pleased and can heartily recommend same.

R. Y. TODD.



Cycloidal National Unit Furnace Heats This Large Residence

Stronghurst, Ill.

I take this opportunity to thank you for your efforts in introducing your Cycloidal NATIONAL Furnace, and inducing me to handle the same. I have sold several this season — they have given the users entire satisfaction. In fact, the users were the first to grow enthusiastic over the Furnace. I am favorably impressed with its weight and up-to-date features. Therefore, I wish to thank you for the personal effort you made.

P. A. STAMP.

Norfolk, Nebr.

Just a word of appreciation for the No. 24-48 Unit Pipeless Cycloidal NATIONAL Furnace which we installed last Fall. After a severe test during the cold weather of 1916-1917, we are more than satisfied with results as to heating and economy and consider ourselves fortunate in the selection of the Cycloidal Furnace.

We are heating a nine-room house at a uniform heat with less expense than any previous year when using two coal stoves. We find the Furnace easy to regulate and much cleaner than others I have seen used.

We congratulate ourselves on installing what we consider the best on the market at a moderate price and shall be glad to recommend to anyone interested in the Furnace proposition.

MRS. A. L. GREBEL.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company



9-Room Illinois Home Heated With a Cycloidal
National Furnace

Temperature Same All Over the Room

Weatherby, Mo.

We have installed one of your No. 24-48 Cycloidal NATIONAL Unit Furnaces for our heating system.

We find this the best Heating proposition for our store that has ever been our pleasure to enjoy, we can keep this room at just the right temperature at all times with very little attention and the temperature is just the same all over the room.

We certainly appreciate the new Heating system.

E. E. DEHART.

Media, Ill.

In regard to the Cycloidal NATIONAL Warm Air Furnace will say, it is giving first-class satisfaction. I experienced no trouble during the coldest days this winter in keeping the house warm when the wind was blowing hard and the thermometer showed twenty below zero. It cost us no more to heat the whole house now than it did to heat two rooms with the Base Burner last year. It is a coal-bill saver. I can cheerfully recommend the Cycloidal Furnace and Mr. P. A. Stamp of Stronghurst, Ill., who installed it for me, to any one wanting a first-class job.

JAMES J. MATTHERS.



8-Room Minnesota Home Heated With a Cycloidal
National Furnace

They All Give Excellent Satisfaction

Your Cycloidal NATIONAL Furnace is giving excellent satisfaction.

Gladstone, Ill.

E. E. LANT.

Quincy, Ill.

The Cycloidal NATIONAL Furnace, your dealer, Mr. Gus Scheipering installed for me in my new house, last Fall, is giving good satisfaction, and I heartily recommend this Furnace to any one wanting a first-class heating plant.

FRED W. FUEHR.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Gives Entire Satisfaction
This Fine Roomy Colonial Mansion Heated With a
Cycloidal National Furnace

Macomb, Ill.

Excelsior Stove & Mfg. Co.,
Quincy, Ill.

Dear Sirs:

I am pleased to state I have been using a Cycloidal NATIONAL Furnace for three years with entire satisfaction. In regard to holding fire it has no equal, have held fire 60 hours with fine bed of coals, no kindling necessary. It is sure a fuel saver. Would recommend a Cycloidal NATIONAL Furnace to anyone wishing a first-class heater.

H. P. ZAHREN.

Perry, Ill.

Excelsior Stove & Mfg. Co.,
Quincy, Illinois.

Gentlemen:

We installed a Cycloidal NATIONAL Furnace in the Masonic building recently erected in our city. We are heating both floors with a small amount of fuel and are pleased to say it is giving excellent service and satisfaction. The NATIONAL Furnace was selected over others on account of its scientific construction, superior heating qualities, extraordinary weight, and self-cleaning features. We can recommend a NATIONAL Furnace to anyone wanting a real heating plant.

DAIGH BROS.



Masonic Building

NATIONAL FURNACES ALWAYS SATISFY



A few of the Buildings heated with the Cycloidal National Furnace.

National Stoves, Ranges and Furnaces



What They Say About the National Air Heater

We are more than pleased with the results we have derived from the use of the NATIONAL Room Air Heater, which we purchased of Albert Mahlum, hardware dealer of our city (last fall). It does everything you claim for it.

Yours truly,
MAHLUM & ANDERSON,
Estherville, Ia.

The No. 20-32 Air Heater purchased from you last October has proven to be a wonder. It has heated my large store room comfortably and evenly the whole winter, on four tons of soft coal. Last winter, with a stove, I used seven tons and we had to pack around the stove like sardines to keep warm.

Respectfully,
J. W. KERN,
Athens, Ind.

We use a No. 30-32 NATIONAL Air Heater in our store and it gives satisfactory results. It is a great improvement over any stove. Since we used the Heater, our store room is as warm at the front door same as next to the Heater, and we would recommend this Heater to any merchant. The results are fifty times better and greater than any stove.

Respectfully,
NIX & BERGHOFFER,
Palmyra, Mo.

Last winter I used one of your NATIONAL Air Heaters in my store room, 40x40x12. The Heater was set in one corner of the room within two feet of counter, yet it did not injure the varnish on the counter and the room was comfortable in most distant corner. I don't think it can be equaled as an even heater.

Yours truly,
E. STOUTZENBERGER,
Coleman, Mo.

The Trustees of Trickham School of Dist. No. 67 have instructed me to order from you one NATIONAL Air Heater No. 20-32 complete with air vents. They have a double flue — one for smoke and one for foul air. They are using two of these heaters, therefore, this order is congratulatory.

Please ship Heater at once to C. L. Lawrence, Santa Anna, Texas, and mail bill of lading to him at Trickham, Texas. Hurry all you can as we are likely to need it badly any day.

Yours truly,
J. C. GRIFFIN,
Supt. Public Instruction, Coleman, Texas.

Dear Sir:— We are using two of the NATIONAL Air Heaters in the Ferris Ward School, and we are well pleased with them. In my opinion, they are the best heaters we have ever used.

Yours truly,
G. B. WINN,
Supt. City Schools, Waxahachie, Texas.

On October 1st, 1914, I bought a NATIONAL Air Heater of Mr. J. M. Thomas, salesman for the NATIONAL Air Heaters for my saloon and I must say that I have never had a heater in my saloon that gave the satisfaction as this air heater did. They can't be beat — I recommend them to anyone wishing to buy a heater for a large room or hall.

Yours truly,
GEO. FLEBBE,
Cairo, Nebr.

We take this late opportunity to say that we duly installed the Room Heater No. 20-32 bought of you and find it O. K. We have a furnace of large capacity and bought the Heater of you so we would not have to force the heat in Furnace, but the air heated by your "Stove" seems to reach all over the store space, so we are more than pleased with it.

MARRIOTT, WOLF & BRICELAND CO.,
Long Grove, Iowa.

I have been using the NATIONAL Hot Air Heater the second year and find them better than they were recommended. The glass at the extreme end of a long store never frosts in the coldest weather.

G. C. WOOSTER,
Palmyra, Mich.

NATIONAL FURNACES ALWAYS SATISFY



Excelsior Stove & Manufacturing Company

I am using one of your No. 20-32 NATIONAL Room Air Heaters — I am heating a room size 33x70x13 feet high and giving entire satisfaction. If I had use for more, I certainly would buy more NATIONAL goods — I am more than pleased. It is a quick heater and holds fire very good.

Yours truly,
FRED J. PRUSHA,

Mgr. and Owner Empress Theatre, Chelsea, Ia.

Gentlemen:— We wish to compliment you on your NATIONAL Air Heaters. We are using two of these Heaters, one in our store and one in the hall on the second floor and find them all and more than you claim for them.

We heated our 28x40 store room, which has a solid plate glass north front on the coldest days last winter with no effort whatever.

We sold one of these heaters to one of our customers and he is heating a room 24x50 in fine shape and likes it better than a furnace.

Trusting you will meet with the success that your Heater entitles you to, we remain,

Very respectfully,
J. D. WEIR & SON,
Huntington, Iowa.

STILES BROS. & CO.,

Annona, Texas.

Gentlemen:— In June, 1915, the School Board of this district purchased from your good firm, seven NATIONAL Room Air Heaters made by the Excelsior Stove & Mfg. Co., Quincy, Ill., for the new brick school building at this place.

The purchase was made upon keen competitive bids. The NATIONAL Heaters were installed last fall and the Board takes pleasure in advising you that they have given the very best satisfaction to be had; strict economy, comfort and convenience being considered, they are giving perfect satisfaction.

The Board heartily approves the installation of NATIONAL Room Heaters in any and all buildings desiring uniform temperature and proper ventilation.

W. S. LAWSON,
Secy. School Board, Avery Dist.

We take pleasure in informing you that we bought one of your No. 20-32 NATIONAL Room Air Heaters from your salesman, Mr. J. C. Boyer. We installed it in a local school house and it is giving very fine satisfaction and School Board approved of same upon investigation. We have decided hereafter to keep one of this type Heater on floor and consider it the very best room heater on the market and are willing to recommend it to anyone at all times.

GLEASON & LINDE, Volga, Iowa.

In the past we have placed the No. 20-32 NATIONAL Air Heater in public buildings and rural schools, giving them severe tests, using all kinds of fuel. They have proven very satisfactory — in fact, under very cold winters we have in this State, the NATIONAL Heater gives us the most uniform heat at least expense of any heater we have ever sold.

JAY B. WARREN,
Montgomery, Mich.

We are using a No. 20-32 NATIONAL Room Heater in our store 27x90 with perfect satisfaction — in fact, the best and most even heat we have ever had.

GEO. D. CRAMER,
Eagleville, Mo.

I have recently installed one of your No. 20-32 NATIONAL Room Heaters in my store, which is 22x50x12, and I find it takes far less coal than a stove and heats the room all over just the right temperature and I can recommend same to anyone.

F. R. EVERETT,
Osborn, Mo.

The Room Heater you shipped us is certainly a dandy. It does the work to perfection in the hotel where it is used.

WM. BUCKER & CO.,
Elmo, Mo.

Space being limited, we print above most testimonials from Stores, etc., to show that our NATIONAL Room Air Heater is well adapted for rooms other than schools.

EXCELSIOR STOVE & MFG. CO.,
Quincy, Ill.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

National Stoves, Ranges and Furnaces



Advertising Cuts



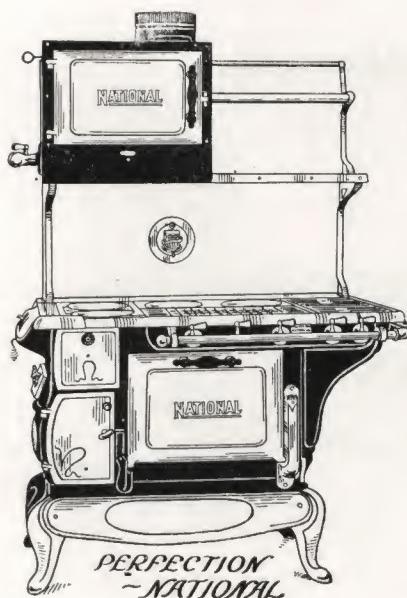
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Advertising Cut No. 35-393



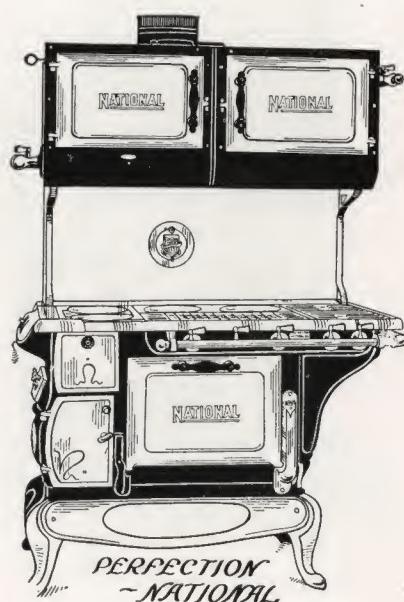
Advertising Cut
No. 35-394



Advertising Cut No. 35-488

Free to Our Customers if included with an order for stoves. The use of these cuts permits dealers to have attractive stationery. Your local printer can do the work which saves you paying the middleman's profits, and allows you to have such quantities printed as you desire at home.

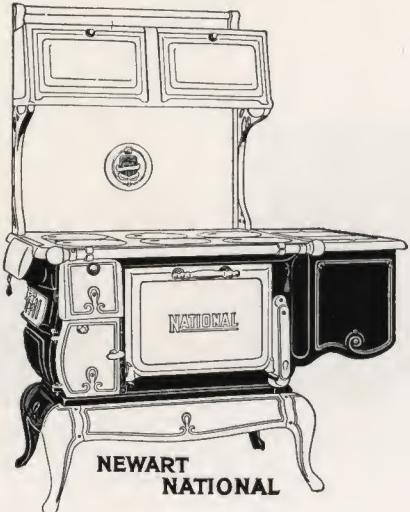
Advertising pays, especially if done through your local papers, which reach the trade direct in your locality. These cuts are especially adapted for newspaper work. Free to customers. Always order by cut number.



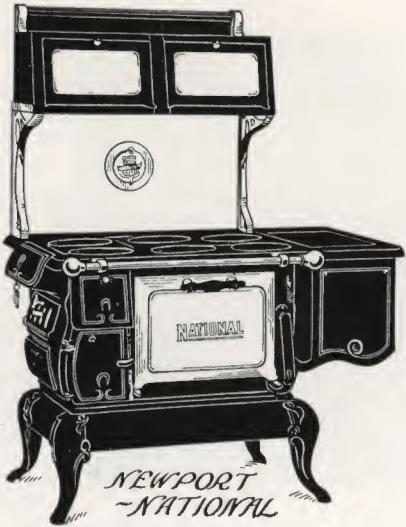
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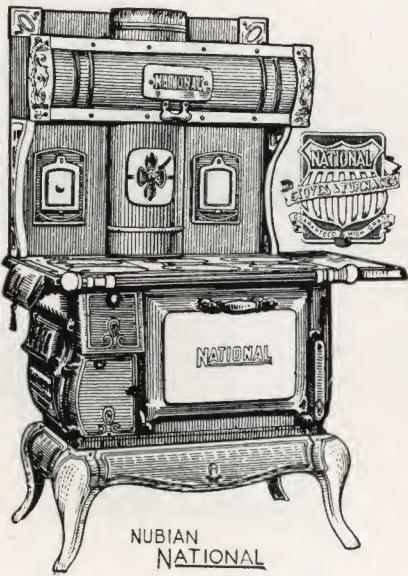
Excelsior Stove & Manufacturing Company



Advertising Cut No. 35-463



Advertising Cut No. 35-490



Advertising Cut No. 35-439

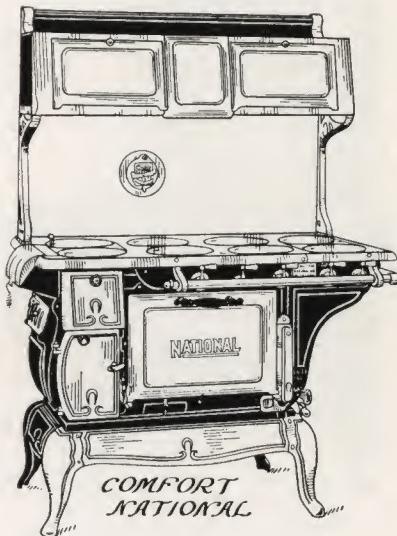


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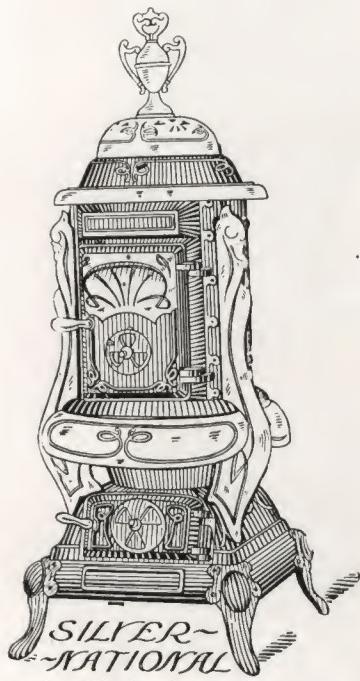
National Stoves, Ranges and Furnaces



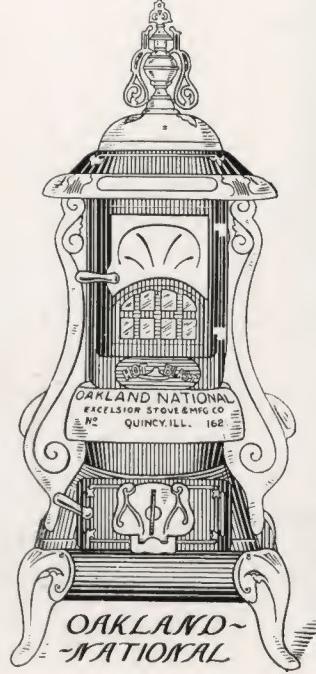
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Advertising Cut No. 35-493



Advertising Cut No. 35-465



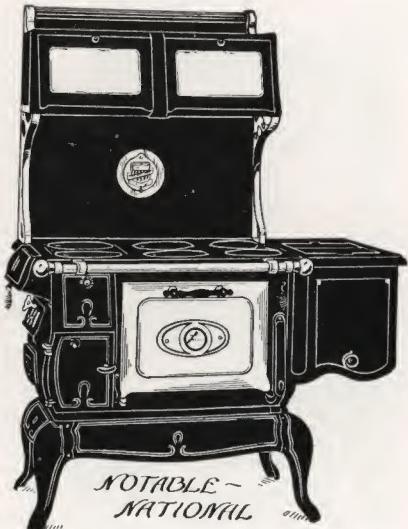
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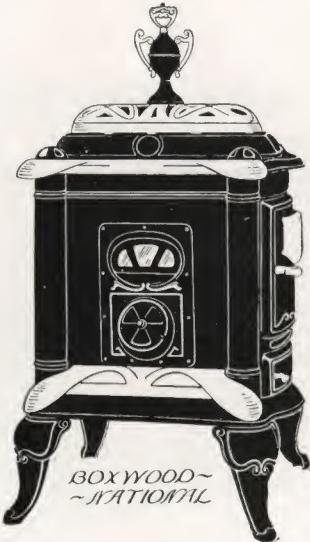
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Excelsior Stove & Manufacturing Company



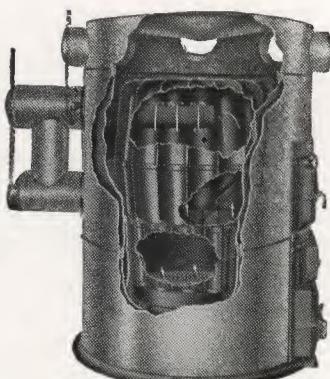
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Advertising Cut No. 35-470



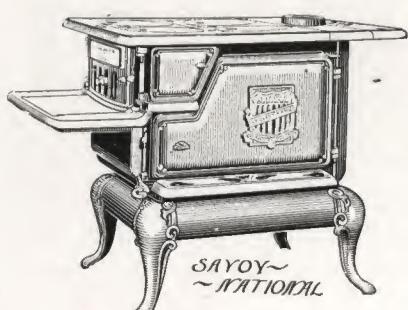
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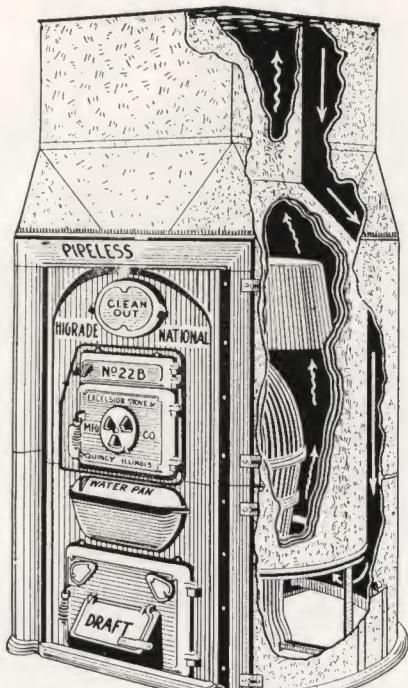


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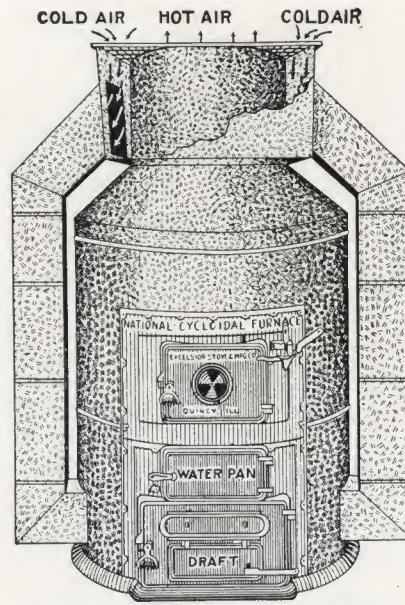
Advertising Cut No. 35-482

National Stoves, Ranges and Furnaces



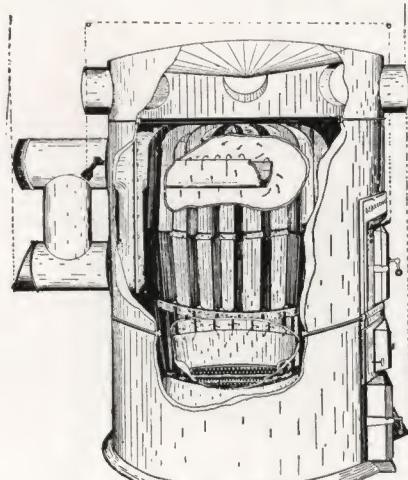
PIPELESS FURNACE
HIGH GRADE NATIONAL

Advertising Cut No. 35-487



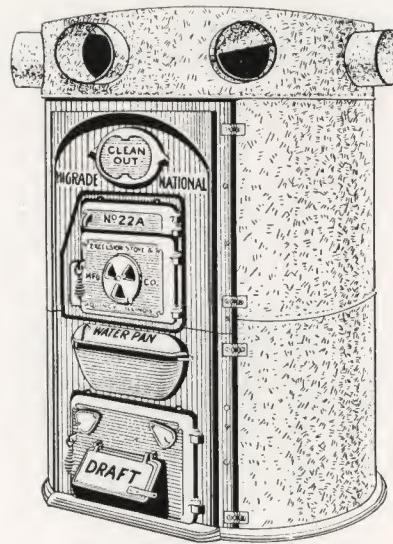
NATIONAL CYCLOIDAL FURNACE
WITH HEATING SYSTEM

Advertising Cut No. 35-485



NATIONAL CYCLOIDAL FURNACE -
PIPE STYLE

Advertising Cut No. 35-484

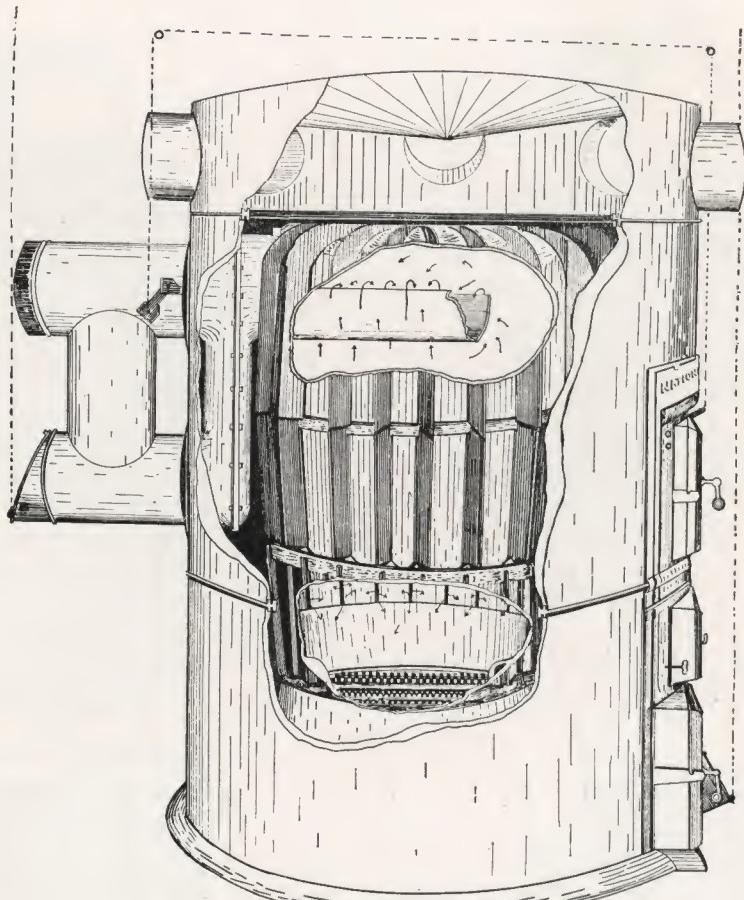


PIPE FURNACE-
HIGH GRADE NATIONAL

Advertising Cut No. 35-466

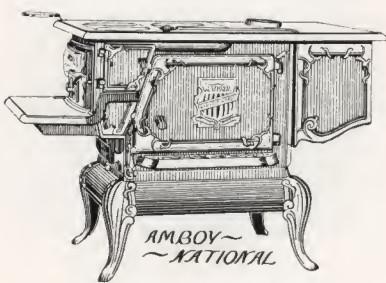


Excelsior Stove & Manufacturing Company

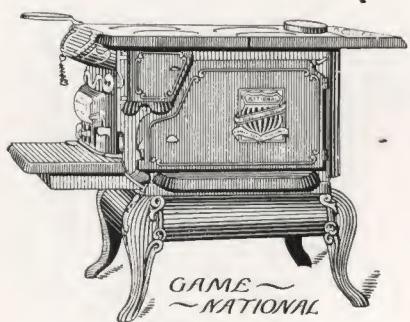


NATIONAL CYCLOIDAL FURNACE
-PIPE-STYLE

Advertising Cut No. 35-483



Advertising Cut No. 35-481



Advertising Cut No. 35-479

National Stoves, Ranges and Furnaces



Installation of a Style "G" National Room Air Heater in a School Room

The above cut shows a NATIONAL Room Air Heater in use in a school room. Note particularly how close the pupils are seated to the heater with no overheating or uncomfortable draughts for any of the pupils. Our System of three wall casings permits these conditions. The Heater is placed in a corner of the Room out of the way and heats the entire room a uniform temperature.

NATIONAL FURNACES ARE GREAT FUEL SAVERS

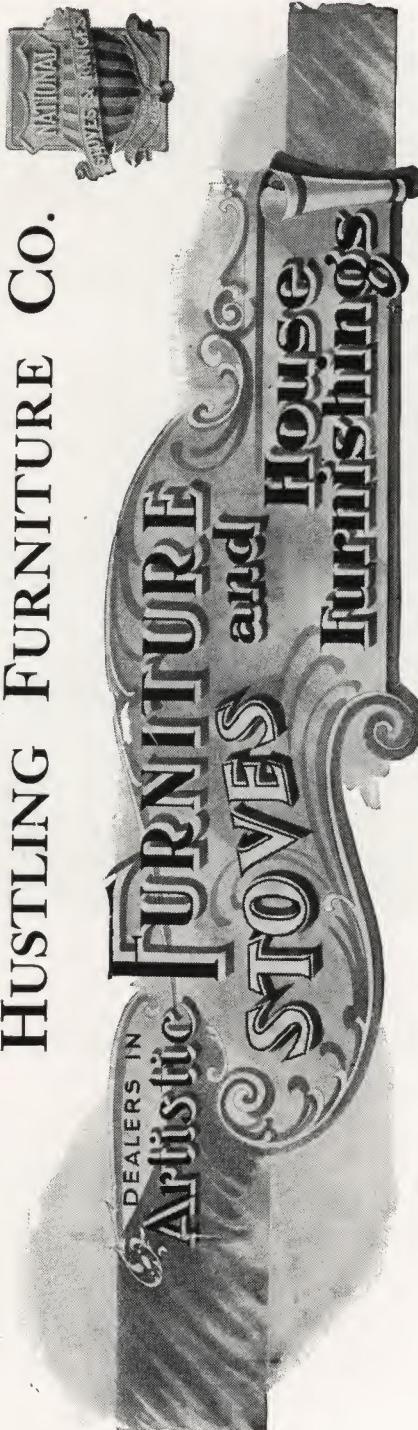


Excelsior Stove & Manufacturing Company

Advertising Cuts

For your bill heads, letter paper, etc., your home printer can use these on your stationery and insert your name in its proper place. Furnished Free F. O. B. Quincy to our customers. Always order by cut numbers.

HUSTLING FURNITURE CO.



Advertising Cut No. 35-302

SPRINGVILLE, ILL.,

JOHN M. BROWN & SON



Advertising Cut No. 35-304

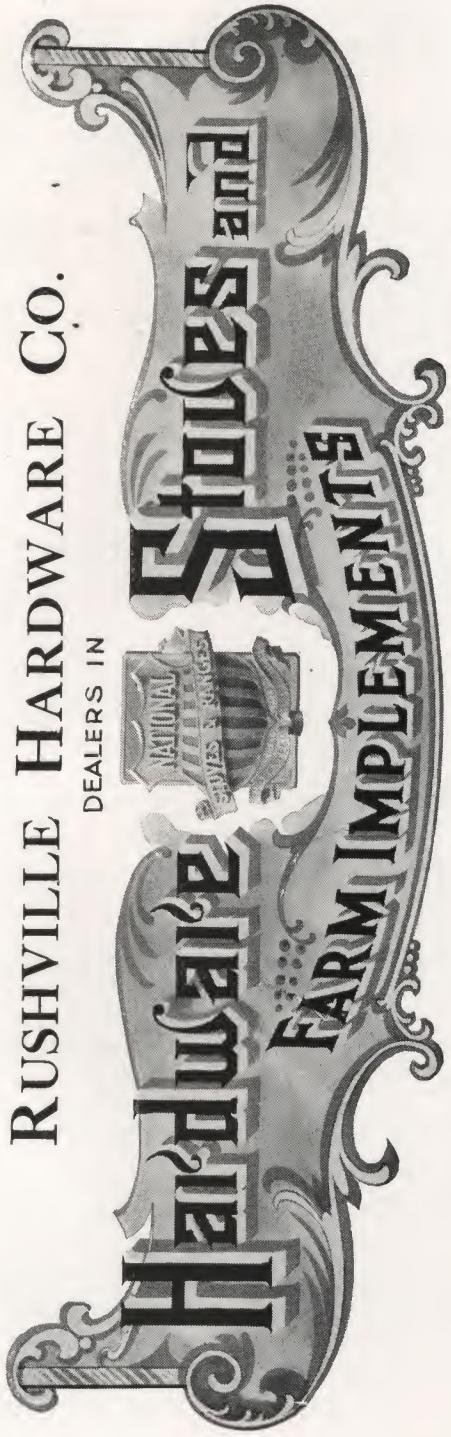
OGDEN, UTAH,

National Stoves, Ranges and Furnaces



RUSHVILLE HARDWARE CO.

DEALERS IN



Advertising Cut No. 35-301

Rushville, Mo.

BYRD, JOHNSON & BYRD



Advertising Cut No. 35-303

MADISON, Wis.,



Excelsior Stove & Manufacturing Company

How to Order Stove Repairs

The following pages are intended to furnish the necessary information that will permit any one to order stove repairs, for any kind of stove, using the proper description to send to the factory, thereby enabling us to understand your requirements.

Insufficient and faulty description of part wanted, neglect to specify the correct number on a stove, and failure to mention the name of the manufacturer of the stove for which parts are wanted, frequently cause the wrong repairs to be shipped, causing expense and delay that can be avoided if the description given is used.

NATIONAL STOVES, RANGES and FURNACES do not require as frequent repairs as other makes, by reason of their containing Iron which is compounded to make castings that resist the attack of Fire.

IMPORTANT

When Ordering Stove or Furnace Repairs

A — Write complete name of stove or furnace, full number and name of the manufacturer, also date of patent if indicated on same. Mention the parts wanted as shown by the illustrations on the following pages.

B — Sample order as it should be written and sent to us.

- 1 Right Hand Top
- 1 Short Grate
- 1 Long Center (2 pieces)

For 8618 E Persian NATIONAL Range made by Excelsior Stove & Mfg. Co., Quincy, Illinois.

C — When determining the right or left hand side of a stove or range, stand facing the stove pipe collar, which means the hearth is considered the front of a cook stove, the oven door is considered the front of a range.

D — When ordering grates, state if wanted for Coal or Wood. If made in two pieces, state if long or short section is wanted.

E — If Linings are made of brick, it must be so stated, since we consider all linings made of cast iron unless otherwise mentioned.

F — Key Plates or anchor plates are alike when looking at them on top, however, some are made with side flanges that underlap the adjoining one. In ordering state if key plate is wanted with or without the side flange.

G — Do not send us burned pieces to duplicate. A full description as indicated on the following pages is the only information necessary.

H — Do not return repairs to us if they do not fit. Write us and explain the apparent cause — we will then advise you disposition to be made.

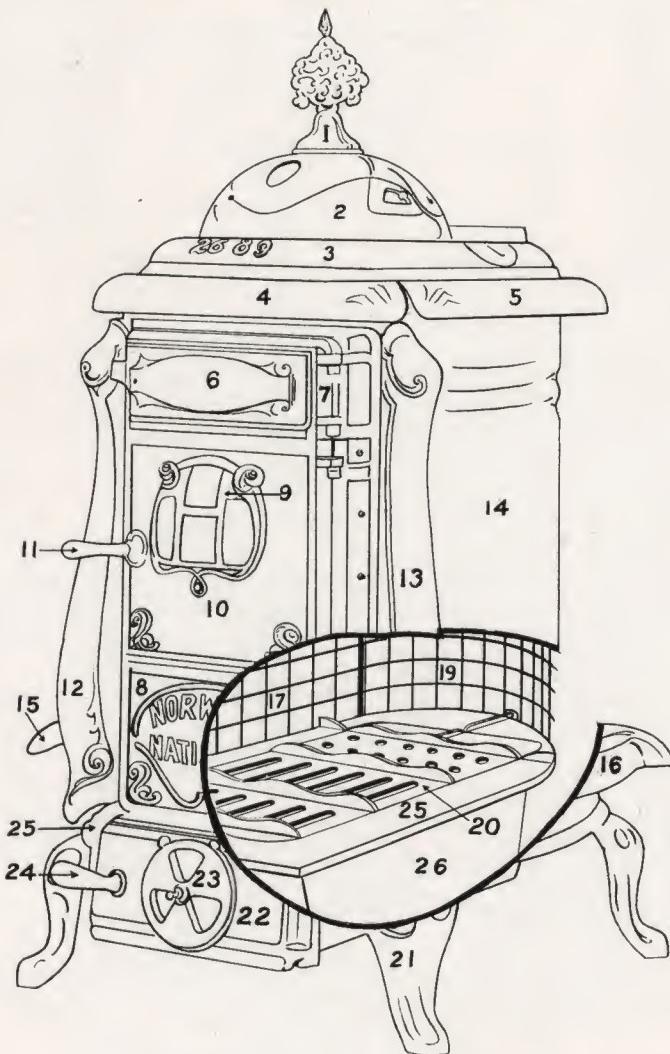
J — We can furnish original repairs for all stoves made in Quincy. We also furnish a complete line of "Break-off" repairs that may be used to fit practically any other stove made in the United States. Send us your repair orders, you will get repairs that fit perfectly.

National Stoves, Ranges and Furnaces



Wood Heater

Order by description not by number.



- 1 Urn
- 2 Urn Bottom
- 3 Main Top
- 4 Front or Back Section Nickel Ring
- 5 Side Section Nickel Ring (state right or left)
- 6 Upper Fire Door Panel
- 7 Upper Fire Door
- 8 Main Front
- 9 Mica Frame
- 10 Lower Fire Door
- 11 Fire Door Handle
- 12 Left Nickel Wing
- 13 Right Nickel Wing
- 14 Steel Body

- 15 Left Nickel Foot Rail
- 16 Right Nickel Foot Rail
- 17 Left Side Lining
- *18 Right Side Lining
- 19 Back Lining
- 20 Wood Grate
- 21 Leg
- 22 Ash Door
- 23 Ash Door Damper
- 24 Ash Door Handle
- 25 Main Bottom
- 26 Ash Pit Bottom

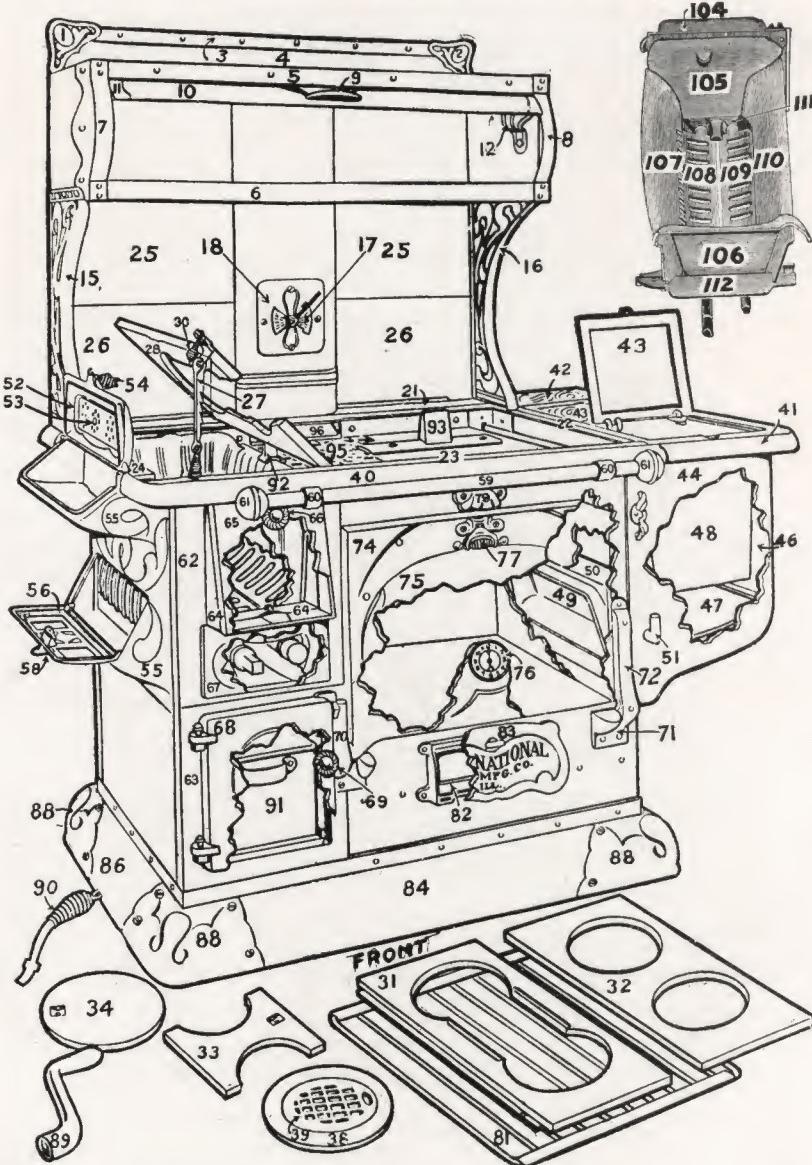
*Not shown in cut.



Excelsior Stove & Manufacturing Company

Steel Range

Order by description not by number.



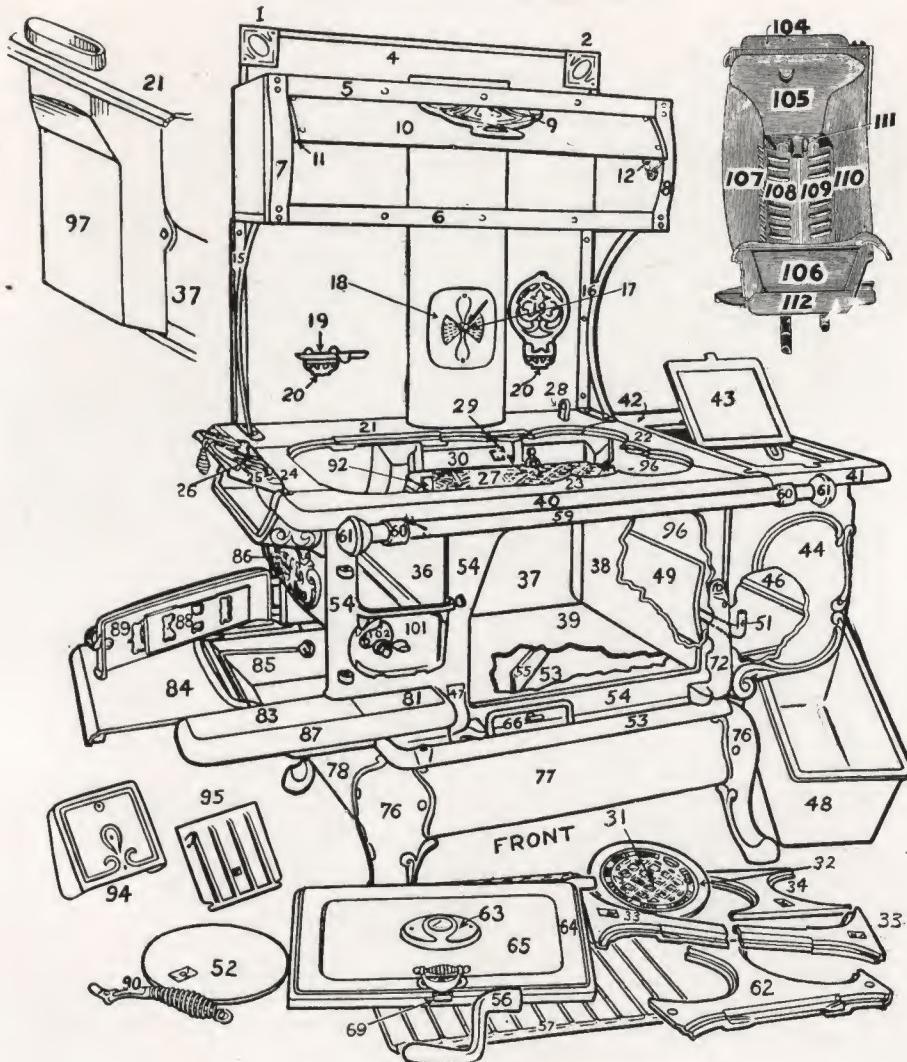
- | | | | |
|------------------------------|---|----------------------------|---|
| 1. Left Balustrade Corner | 30. Wire Lift Handle | 55. Pouch Left End | 83. Clean Out Door |
| 2. Right Balustrade Corner | 31. Key Plate with Flange | 56. End Door Damper | 84. Long Base Strip |
| 3. Balustrade Nickel Edge | 32. Key Plate without Flange | 58. End Door | 85. Short Base Strip |
| 4. Steel Balustrade | 33. Short Center | 59. Towel Bar | 88. Base Corners |
| 5. Closet Top Nickel Edge | 34. Cover | 60. Towel Bar Clamp | 89. Grate Shaker |
| 6. Closet Bottom Nickel Edge | 38. Cereal Cover | 61. Towel Bar End | 90. Cover Lifter |
| 7. Left Closet Nickel End | 39. Cereal Cover Register | 62. Fire Door Frame | 92. Front Center Rest |
| 8. Right Closet Nickel End | 40. Front Top Nickel Band | 63. Ash Door Frame | 93. Back Center Rest |
| 9. Closet Door Panel | 41. Reservoir Top Nickel Band | 64. Fire Door | 95. Top Oven Plate Lining |
| 10. Closet Door | 42. Reservoir Top | 65. Fire Door Panel | 96. Direct Draft Damper |
| 11. Left Closet Door Hinge | 43. Reservoir Covers (state if
large or small section) | 66. Fire Door Handle | *97. Direct Draft Damper Frame |
| 12. Right Closet Door Hinge | 44. Right Reservoir End | 67. Grate Panel | 104. Fire Box Extension |
| 15. Left Closet Bracket | 45. Left Reservoir End | 68. Ash Door | 105. Back End Lining |
| 16. Right Closet Bracket | 46. Reservoir Back | 69. Ash Door Handle | 106. Front End Lining |
| 17. Closet Pipe Damper | 47. Reservoir Bottom | 70. Left Oven Door Hinge | 107. Left End Front Grate |
| 18. Closet Pipe Damper Frame | 48. Reservoir Boiler (state if
Cast Iron or Copper) | 71. Inside Spring Pocket | 108. Long Grate |
| 21. Back Top | 49. Reservoir Damper | 72. Outside Spring Pocket | 109. Short Grate |
| 22. Right End Top | 50. Reservoir Damper Frame | 74. Oven Door | 110. Fire Back (if in 3 pieces
state ends or center) |
| 23. Front Top | 51. Reservoir Damper Handle | 75. Oven Door Steel Lining | 111. Back Grate Rest |
| 24. Left End Top | 52. Feed Door | 76. Oven Thermometer | 112. Front Grate Rest |
| 25. Steel Closet Back | 53. Feed Door Damper | 77. Oven Door Handle | *113. Grate Cogs |
| 26. Enamel Splasher | 54. Wire Lift Handle | 79. Oven Door Catch | *114. Cog cover |
| 27. Ratchet Bar | | 81. Oven Rack | *Not shown in cut. |
| 28. Front Key Plate | | 82. Clean Out Frame | |

National Stoves, Ranges and Furnaces



Cast Range

Order by description not by number.



- | | | | |
|--------------------------------|---|----------------------------|---|
| 1. Left Balustrade Corner | 29. Direct Draft Damper Clip | 53. Main Bottom | 87. Hearth Nickel Edge |
| 2. Right Balustrade Corner | 30. Direct Draft Damper | 54. Main Front | 88. Left End Draft Door Damper |
| 4. Steel Balustrade | 31. Cereal Cover Register | 55. Bottom Flue Strip | 89. Left End Draft Door |
| 5. Closet Top Nickel Edge | 32. Cereal Cover | 56. Grate Shaker | 90. Cover Lifter |
| 6. Closet Bottom Nickel Edge | 33. Long Center | 57. Oven Rack | 94. Fire Door Panel |
| 7. Left Closet Nickel End | 34. Short Center | 59. Towel Bar | 95. Fire Door |
| 8. Right Closet Nickel End | 36. Left End Oven Plate | 60. Towel Bar Clamp | 96. Main Right End |
| 9. Closet Panel | 37. Main Back | 61. Towel Bar End | 97. Back Flue Bag |
| 10. Closet Door | 38. Right End Oven Plate | 62. Tee Center | 101. Grate Panel |
| 11. Left Closet Hinge | 39. Bottom Oven Plate | 63. Oven Door Panel | 102. Grate Lock |
| 12. Right Closet Hinge | 40. Front Top Nickel Band | 64. Oven Door | 104. Fire Box Extension |
| 15. Left Closet Bracket | 41. Reservoir Top Nickel Band | 65. Oven Door Steel Lining | 105. Back End Lining |
| 16. Right Closet Bracket | 42. Reservoir Top | 66. Front Flue Stop | 106. Front End Lining |
| 17. Closet Pipe Damper | 43. Reservoir Covers (state if
large or small section) | 69. Oven Door Handle | 107. Left End Front Grate |
| 18. Closet Pipe Damper Frame | 44. Right Reservoir End | 72. Spring Pocket | 108. Long Grate |
| 19. Closet Tee Shelf | *45. Left Reservoir End | 76. Leg | 109. Short Grate |
| 20. Tee Shelf Hinge | 46. Reservoir Back | 77. Long Base Strip | 110. Fire Back (if in pieces state
ends or center section) |
| 21. Back Top | 47. Left Oven Door Hinge | 78. Short Base Strip | 111. Back Grate Rest |
| 22. Right End Top | 48. Reservoir Boiler (state if
Cast Iron or Copper) | 81. Right Ash Guard | 112. Front Grate Rest |
| 23. Front Top | 49. Reservoir Damper | *82. Left Ash Guard | *113. Grate Cogs |
| 24. Left End Top | 51. Reservoir Damper Handle | 83. Hearth | *114. Cog Wheel Cover |
| 25. Feed Door | 52. Cover | 84. Hearth Slide | |
| 26. Feed Door Damper | | 85. Ash Pan | |
| 28. Direct Draft Damper Handle | | 86. Pouch Left End | |

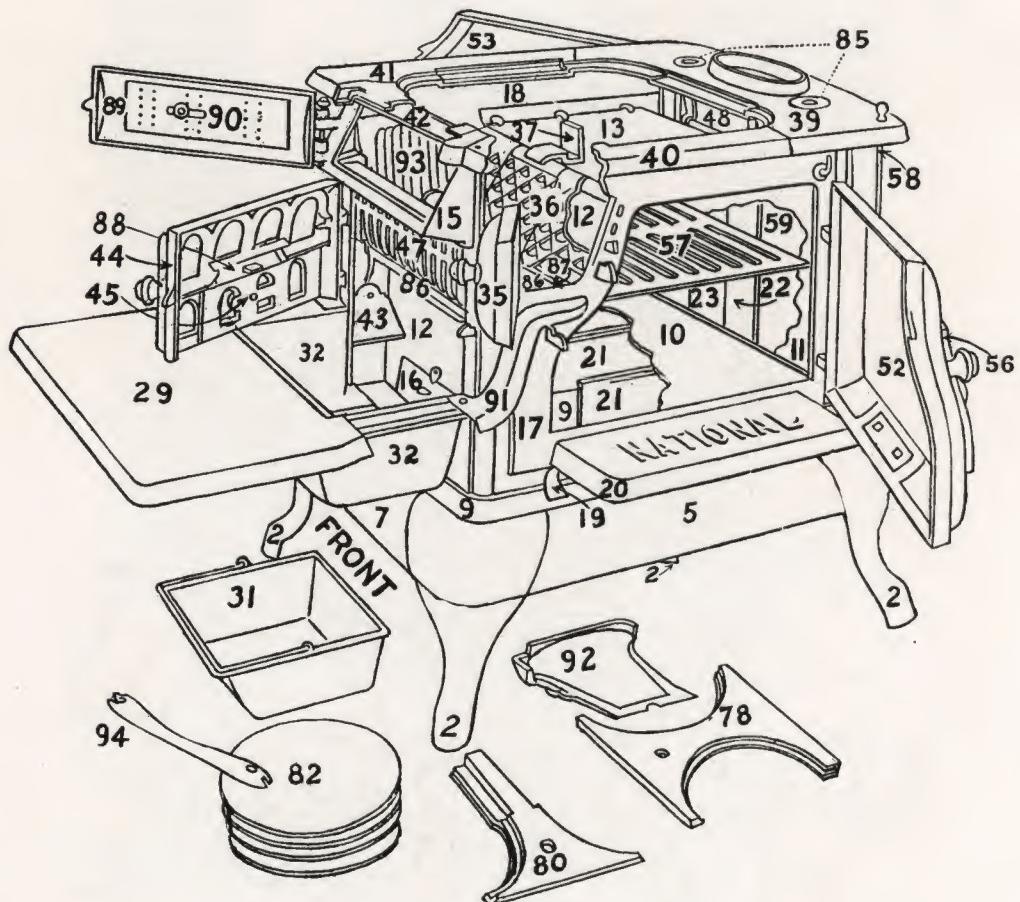
*Not shown in cut.



Excelsior Stove & Manufacturing Company

Coal Cook Stove

Order by description not by number.



- | | | | | | |
|----|-----------------------|----|--|-----|--|
| 2 | Leg | 36 | Fire Back (if in 3 pieces
state ends or center) | 80 | Long Center (state if in one
or two pieces) |
| 5 | Long Base Strip | 37 | Center Rest | 82 | Covers |
| 7 | Short Base Strip | 39 | Back Top | 85 | Flue Covers |
| 9 | Main Bottom | 40 | Right Side Top | 86 | Bottom Grate (state if long
or short section) |
| 10 | Bottom Oven Plate | 41 | Left Side Top | 87 | Grate Rest |
| 11 | Back Oven Plate | 42 | Front Top | 88 | Poker Door |
| 12 | Front Oven Plate | 43 | Inside Ash Guard (State right
or left) | 89 | Feed Door |
| 13 | Top Oven Plate | 44 | Front Door | 90 | Feed Door Damper |
| 15 | Pouch Front | 45 | Front Door Damper | 91 | Outside Ash Guard (state
right or left) |
| 16 | Inside Flue Stop | 47 | Front Grate | 92 | Right End Lining |
| 17 | Main Right Side | 48 | Rolling Damper | 93 | Left End Lining |
| 18 | Main Left Side | 52 | Right Oven Door | 94 | Grate Shaker |
| 19 | Oven Door Kicker | 53 | Left Oven Door | *95 | Grate Cogs |
| 20 | Outside Oven Shelf | 56 | Oven Door Panel | *96 | Cog Wheel Covers |
| 21 | Bottom Flue Strips | 57 | Oven Rack | | *Not shown in cut. |
| 22 | Right Back Flue Strip | 58 | Towel Rod | | |
| 23 | Left Back Flue Strip | 59 | Main Back (state upper or
lower section) | | |
| 29 | Hearth Slide | 78 | Short Center | | |
| 31 | Ash Pan | | | | |
| 32 | Hearth | | | | |
| 35 | Fire Door | | | | |

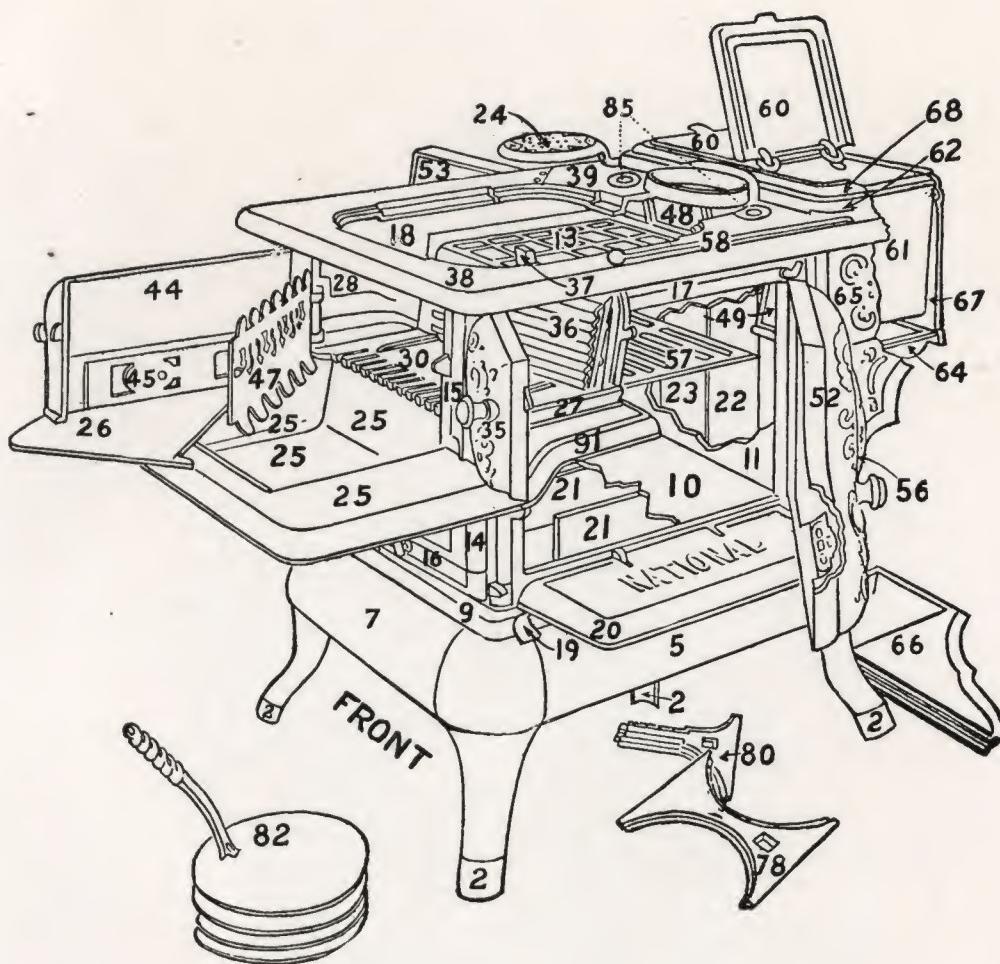
Note — See Wood Cook for Reservoir Parts.

National Stoves, Ranges and Furnaces



Wood Cook Stove

Order by description not by number.



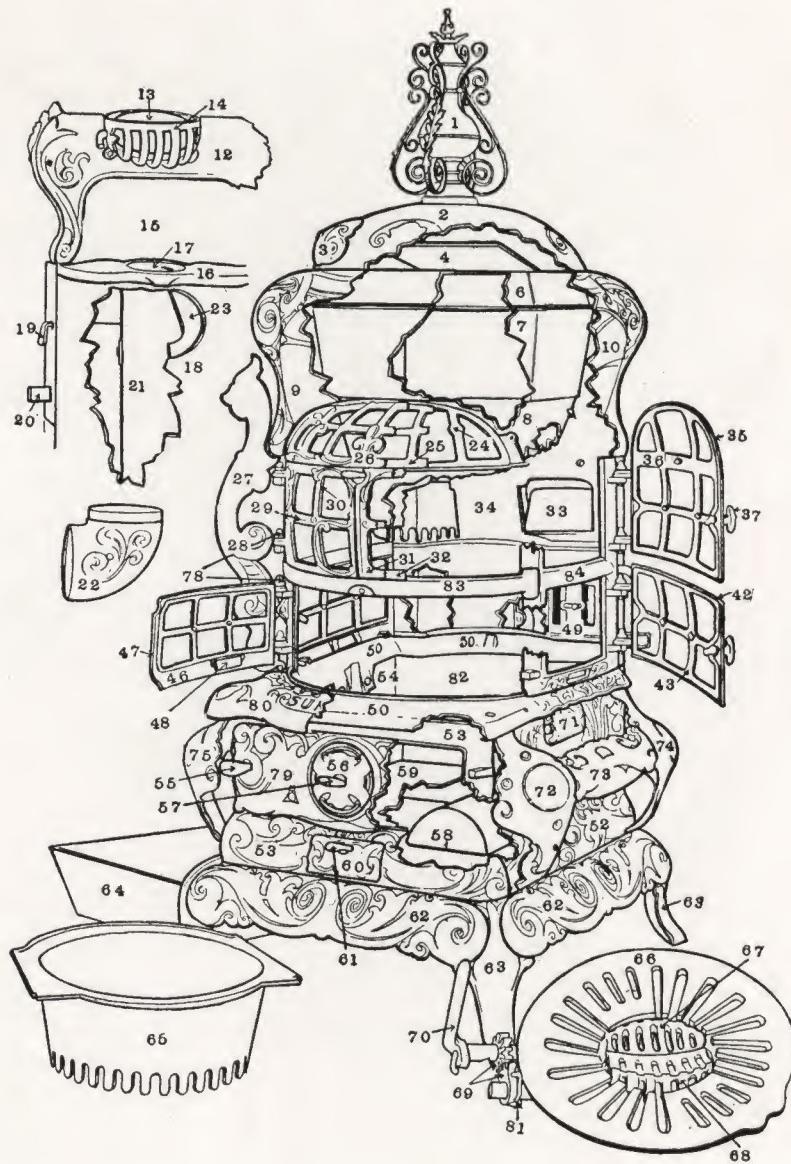
2	Leg	26	Hearth Slide	58	Towel Rod
5	Long Base Strip	27	Fire Door Frame	60	Reservoir Covers (state if small or large section)
7	Short Base Strip	28	Fire Box Extension	61	Reservoir Boiler (state if Cast Iron, Galv. Iron or Copper)
9	Main Bottom	30	False Bottom	62	Reservoir Top
10	Bottom Oven Plate	35	Fire Door	64	Reservoir Bottom
11	Back Oven Plate	36	Fire Back (if in 3 pieces state if ends or center)	65	Right Reservoir End
13	Top Oven Plate	37	Center Rest	66	Left Reservoir End
14	Lower Front	38	Front Top	67	Reservoir Back
15	Upper Front	39	Back Top	68	Reservoir Cover Frame
16	Flue Stop	44	Front Door	78	Short Center
17	Main Right Side	45	Front Door Damper	80	Long Center (state if in one or two pieces)
18	Main Left Side	47	Wood Fender	82	Covers
19	Oven Door Kicker	48	Rolling Damper	85	Flue Covers
20	Outside Oven Shelf	49	Reservoir Damper		
21	Bottom Flue Strip	52	Right Oven Door		
22	Right Back Flue Strip	53	Left Oven Door		
23	Left Back Flue Strip	56	Oven Door Panel		
24	Tea Pot Shelf	57	Oven Rack		
25	Hearth				



Excelsior Stove & Manufacturing Company

Hard Coal Heater

Order by description not by number.



National Stoves, Ranges and Furnaces



Hard Coal Heater

Order by description not by number.

- | | |
|---|--|
| 1 Urn - | 43 Right Lower Side Mica Frame |
| 2 Urn Bottom | *44 Right Lower Front Mica Door |
| 3 Urn Bottom Ornament | *45 Right Lower Front Mica Frame |
| 4 Magazine Cover | 46 Left Lower Front Mica Frame |
| *5 Back Hopper Plate | 47 Left Lower Front Mica Door |
| 6 Main Top | 48 Poker Door |
| 7 Side Hopper Plate
(State right or left side.) | 49 Check Draft Damper |
| 8 Magazine Feed | 50 Ash Pit Top |
| 9 Front Nickel Dome | *51 Hot Air Flue Cover (on lower main back)
(State if right or left.) |
| 10 Right Nickel Dome | 52 Right Ash Pit Side |
| *11 Left Nickel Dome | 53 Ash Door Frame |
| 12 Back Nickel Dome | *54 Left Ash Pit Side |
| 13 Hot Air Damper | 55 Ash Door Handle |
| 14 Hot Air Damper Frame | 56 Ash Door Damper |
| 15 Upper Outside Circulating Flue Back | 57 Ash Door Damper Handle |
| 16 Tea Kettle Top | 58 Main Bottom |
| 17 Tea Kettle Cover | 59 Bottom under Ash Pan |
| 18 Lower Outside Back | 60 Clean Out Door |
| 19 Direct Draft Damper Handle | 61 Clean Out Door Key |
| 20 Check Draft Damper Handle | 62 Skirting (state front or side) |
| 21 Inner Back Flue Strip
(State right, left or center.) | 63 Leg |
| 22 Cast Elbow | 64 Ash Pan |
| 23 Flue Strip Cap | 65 Fire Pot |
| 24 Upper Front | 66 Round Grate |
| 25 Dome Inside Mica Frame | 67 Long Duplex Grate |
| 26 Dome Outside Mica Frame | 68 Short Duplex Grate |
| 27 Rear Half Front Nickel Wing
(State if right or left.) | 69 Grate Cogs |
| 28 Front Half Nickel Wing
(State if right or left.) | 70 Grate Shaker
(State if for Duplex or Round Grate) |
| 29 Left Upper Front Mica Door | 71 Grate Panel |
| 30 Left Upper Front Mica Frame | 72 Right Front Foot Rail Bracket |
| 31 Right Upper Front Mica Door | 73 Right Foot Rail Only |
| 32 Right Upper Front Mica Frame | 74 Right Back Foot Rail Bracket |
| 33 Direct Draft Damper | 75 Left Front Foot Rail Bracket |
| 34 Inside Back | *76 Left Foot Rail Only |
| 35 Right Upper Side Mica Door | *77 Left Back Foot Rail Bracket |
| 36 Right Upper Side Mica Frame | 78 Hinge Pins |
| 37 Mica Door Key | 79 Ash Door |
| *38 Left Upper Side Mica Door | 80 Base Top Nickel Name Plate |
| *39 Left Upper Side Mica Frame | 81 Grate Cog Holder |
| *40 Left Lower Side Mica Door | 82 Ash Pit Back |
| *41 Left Lower Side Mica Frame | 83 Front Middle Strip |
| 42 Right Lower Side Mica Door | 84 Main Right Side |
| | *85 Main Left Side |

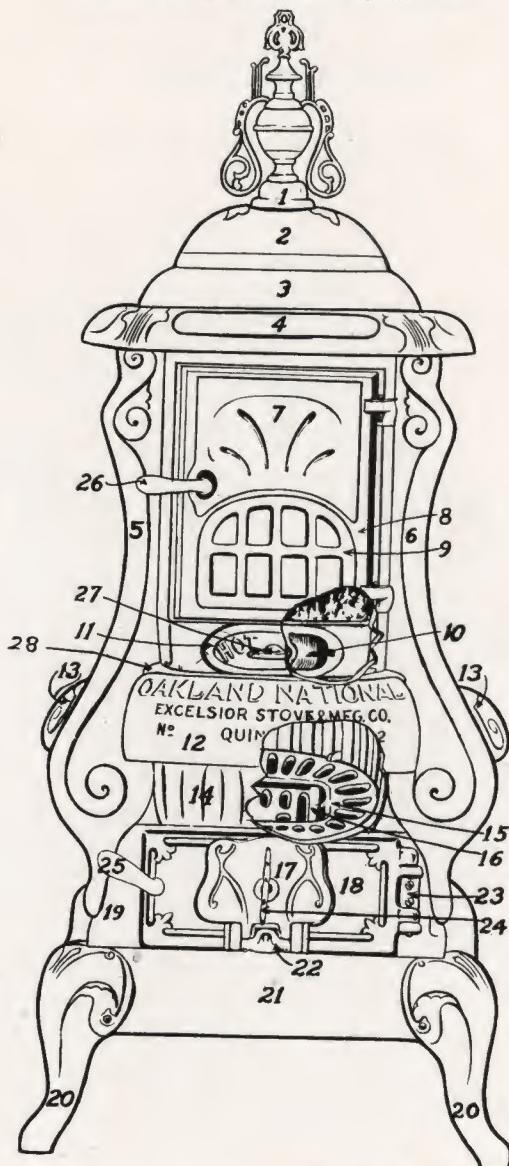
*Not shown in Cut.



Excelsior Stove & Manufacturing Company

Coal Heater

Order by description not by number.



- | | |
|--|--------------------------------|
| 1 Urn | 17 Ash Door Damper |
| 2 Urn Bottom | 18 Ash Door |
| 3 Main Top | 19 Ash Pit Base |
| 4 Section of Nickel Top Ring | 20 Leg |
| 5 Left Nickel Wing | 21 Section of Skirting |
| 6 Right Nickel Wing | 22 Ash Door Damper Hinge |
| 7 Front Door Panel | 23 Ash Pit Base Hinge |
| 8 Feed Door | 24 Ash Door Damper Screw Key |
| 9 Mica Frame | 25 Ash Door Handle |
| 10 Front Section of Blast Ring | 26 Feed Door Handle |
| 11 Hot Blast Damper | 27 Blast Damper Screw Key |
| 12 Front Nickel Foot Rail | 28 Front Section Fire Pot Ring |
| 13 Side Nickel Foot Rail (state right or left) | *29 Back Section Fire Pot Ring |
| 14 Fire Pot | *30 Main Bottom |
| 15 Round Grate | |
| 16 Grate Slide | |

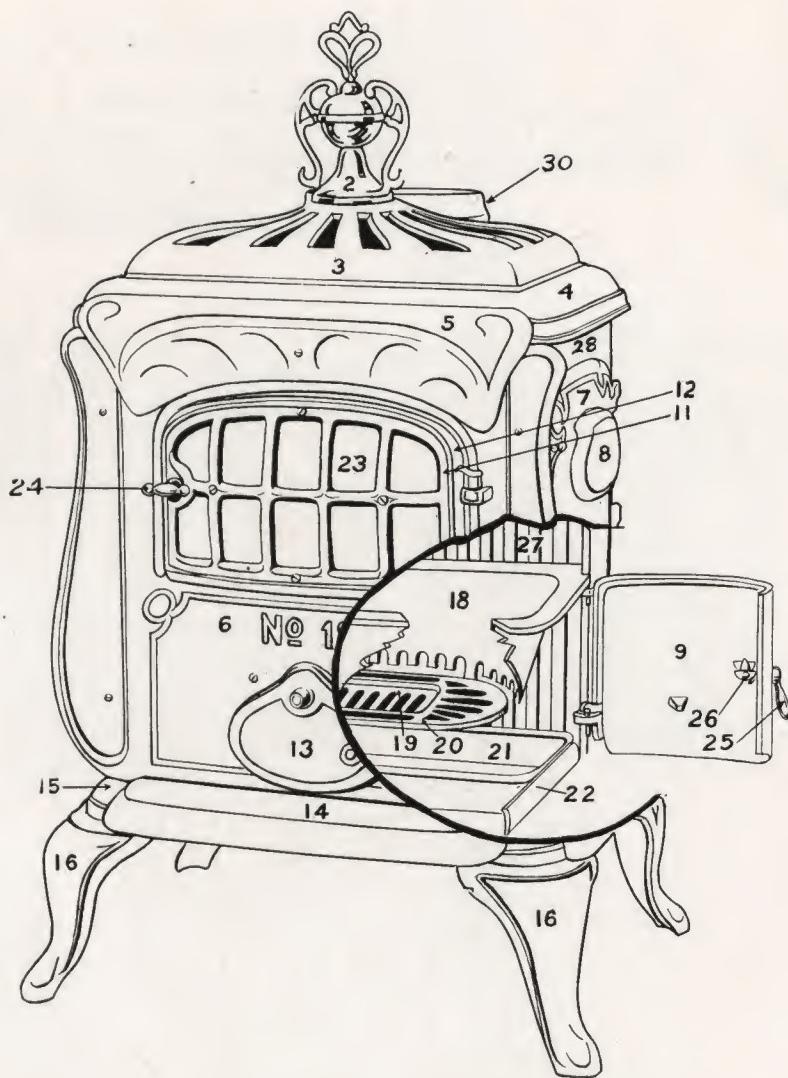
*Not shown in Cut.

National Stoves, Ranges and Furnaces



Coal Heater

Order by description not by number.

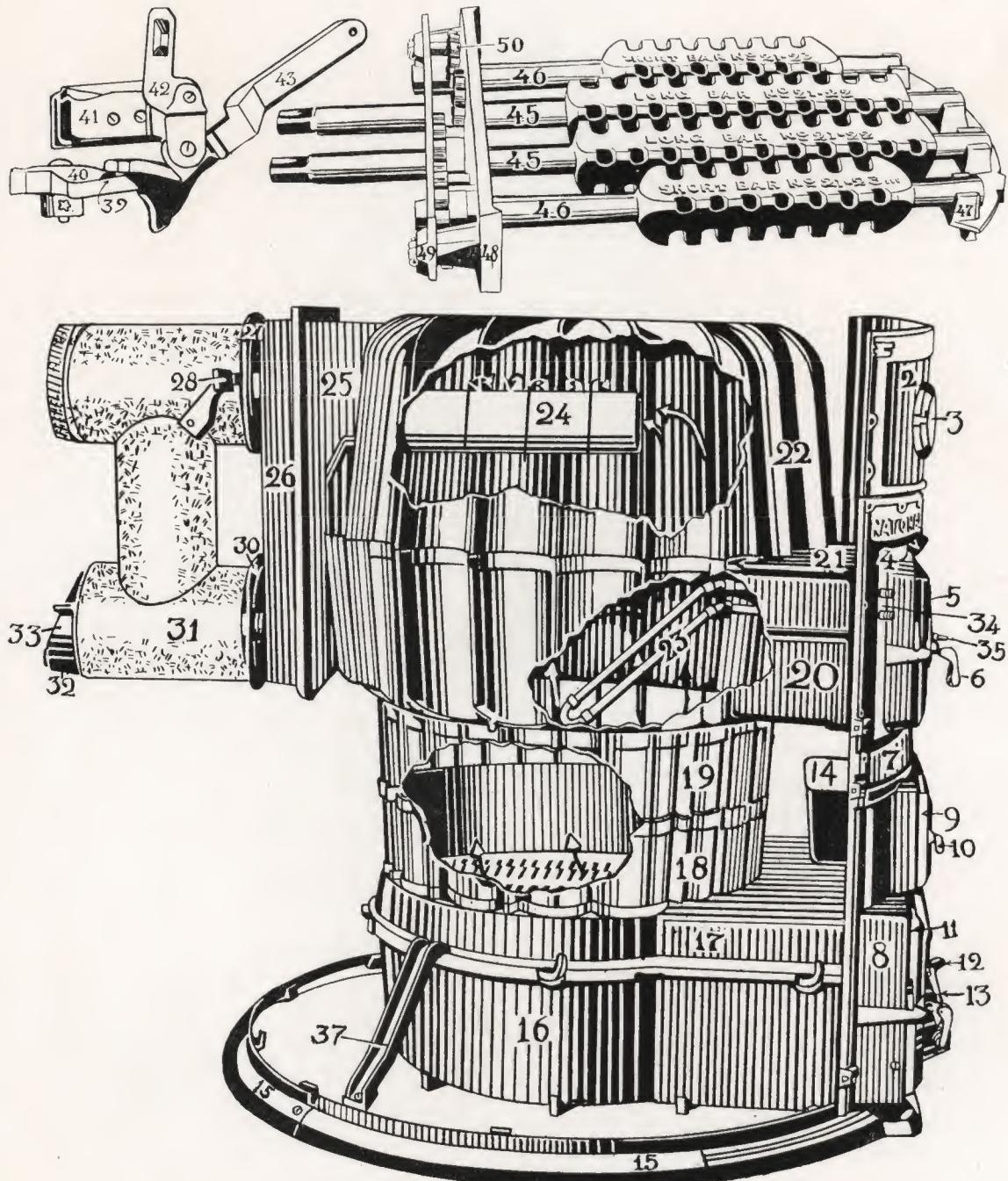


2	Urn	18	Fire Pot
3	Urn Bottom	19	Grate Slide
4	Main Top	20	Round Grate
5	Front Nickel Panel	21	Ash Pan
6	Main Front	23	Mica
7	Upper End Feed Door	24	Mica Door Handle
8	Name Plate	25	End Fire Door Handle
9	Lower End Feed Door	26	End Fire Door Latch
11	Mica Frame	27	Main Back
12	Mica Door	28	Main Right Side
13	Front Draft Damper	*29	Main Left Side
14	Foot Rail	30	Reversible Collar
15	Main Bottom	*31	Outside End Ash Guard
16	Leg	*Not shown in cut.	



Excelsior Stove & Manufacturing Company

Warm Air Furnace



National Stoves, Ranges and Furnaces



Warm Air Furnace

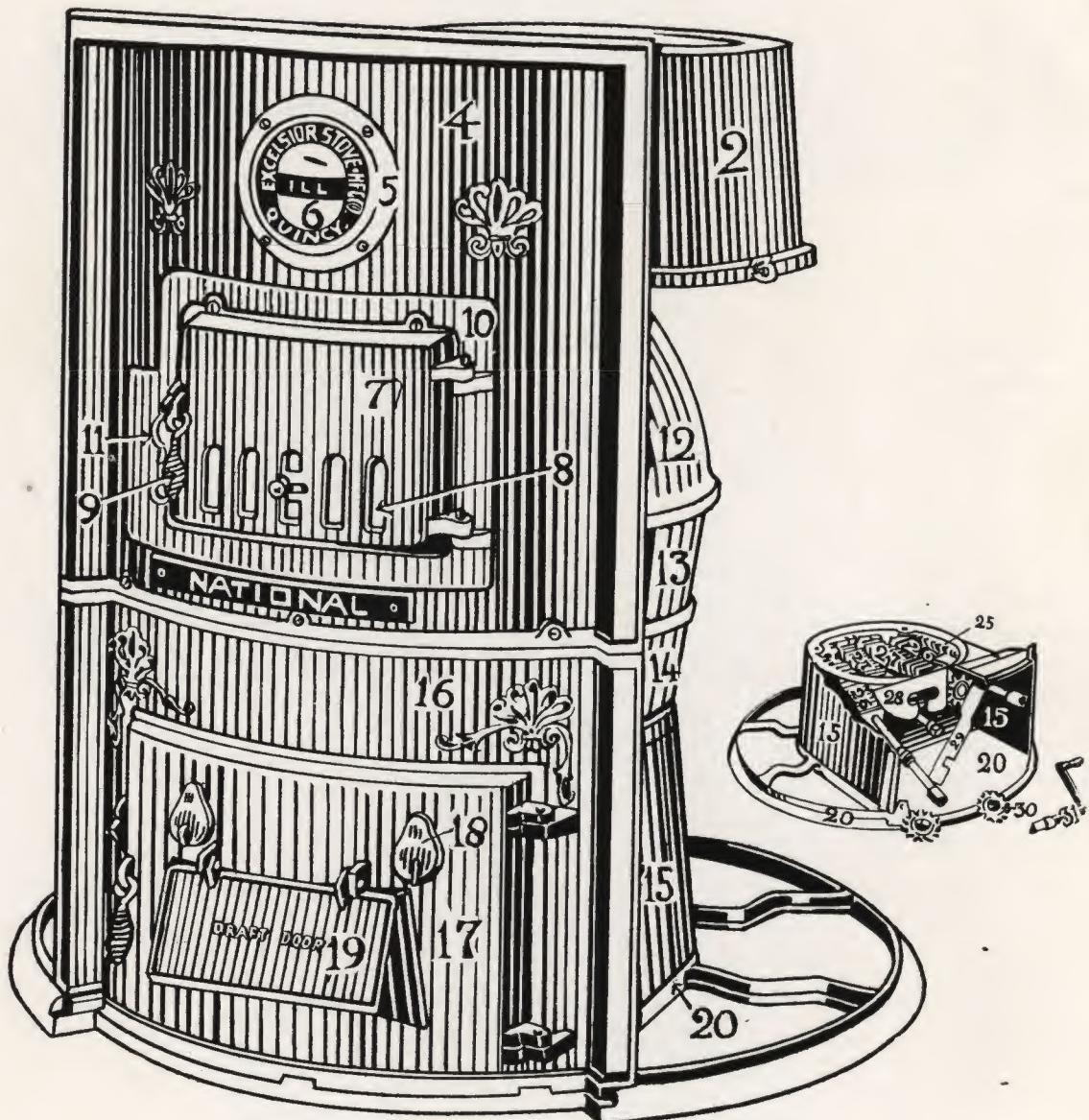
When ordering repair parts for the Cycloidal NATIONAL Furnaces, made by the **Excelsior Stove & Mfg. Co.**, Quincy, Ill., the number on the pieces indicates the part wanted and may be used in ordering repairs. This is the only furnace on which this system applies.

2	Upper Front	27	Upper Outside Casing Collar
3	Upper Front Panel	*27A	Upper Inside Casing Collar
4	Fire Door Frame	28	Direct Draft Damper Handle
5	Fire Door	*29	Direct Draft Damper
6	Fire Door Handle	30	Lower Outside Casing Collar
7	Center Front Frame	*30A	Lower Inside Casing Collar
8	Ash Pit Front	*31	Double T Joint
9	Water Pan Door	32	Check Damper Frame
10	Water Pan Door Handle	33	Check Damper
11	Ash Pit Door	34	Hole Stop
12	Draft Door Damper Handle	35	Fire Door Damper
13	Draft Door	*36	Fire Door Lining
14	Water Pan	37	Base Ring Brace
15	One Third Section Base Ring	39	Friction Ball
16	Lower Section Ash Pit	40	Section of Nc. 5
17	Upper Section Ash Pit	41	Automatic Clamp
18	Lower Fire Pot	42	Automatic Lock
19	Upper Fire Pot	43	Automatic Lever
20	Feed Section	45	Long Grate
21	Feed Chute Cover	46	Short Grate
22	Dome Section	47	Back Grate Rest
23	Water Coil	48	Front Grate Rest
24	Baffle Plate	49	Cog Wheel Guard
25	Inside Section Reversible Flue	50	Cog Wheel
26	Outside Section Reversible Flue		*Not shown in cut.



Excelsior Stove & Manufacturing Company

Warm Air Furnace



National Stoves, Ranges and Furnaces



Warm Air Furnace

Order by description not by number.

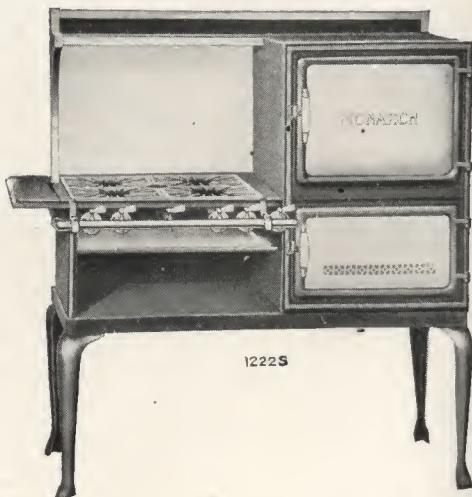
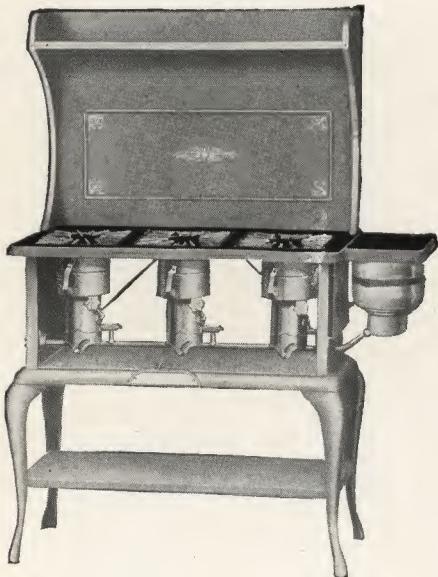
- | | |
|---------------------------|-----------------------|
| 2 Main Section Radiator | 15 Ash Pit |
| 3 Bottom Section Radiator | 16 Lower Front |
| 4 Upper Front | 17 Ash Pit Door |
| 5 Clean Out Frame | 18 Grate Hole Stop |
| 6 Clean Out Door | 19 Draft Door |
| 7 Fire Door | 20 Ash Pit Bottom |
| *7A Fire Door Lining | 25 Grate Frame |
| 8 Fire Door Damper | 26 Long Grate |
| 9 Fire Door Handle | 27 Short Grate |
| 10 Fire Door Frame | 28 Front Grate Hanger |
| 11 Hole Stop | 29 Cog Wheel Guard |
| 12 Dome | 30 Cog Wheel |
| 13 Upper Fire Pot | 31 Grate Shaker |
| 14 Lower Fire Pot | |

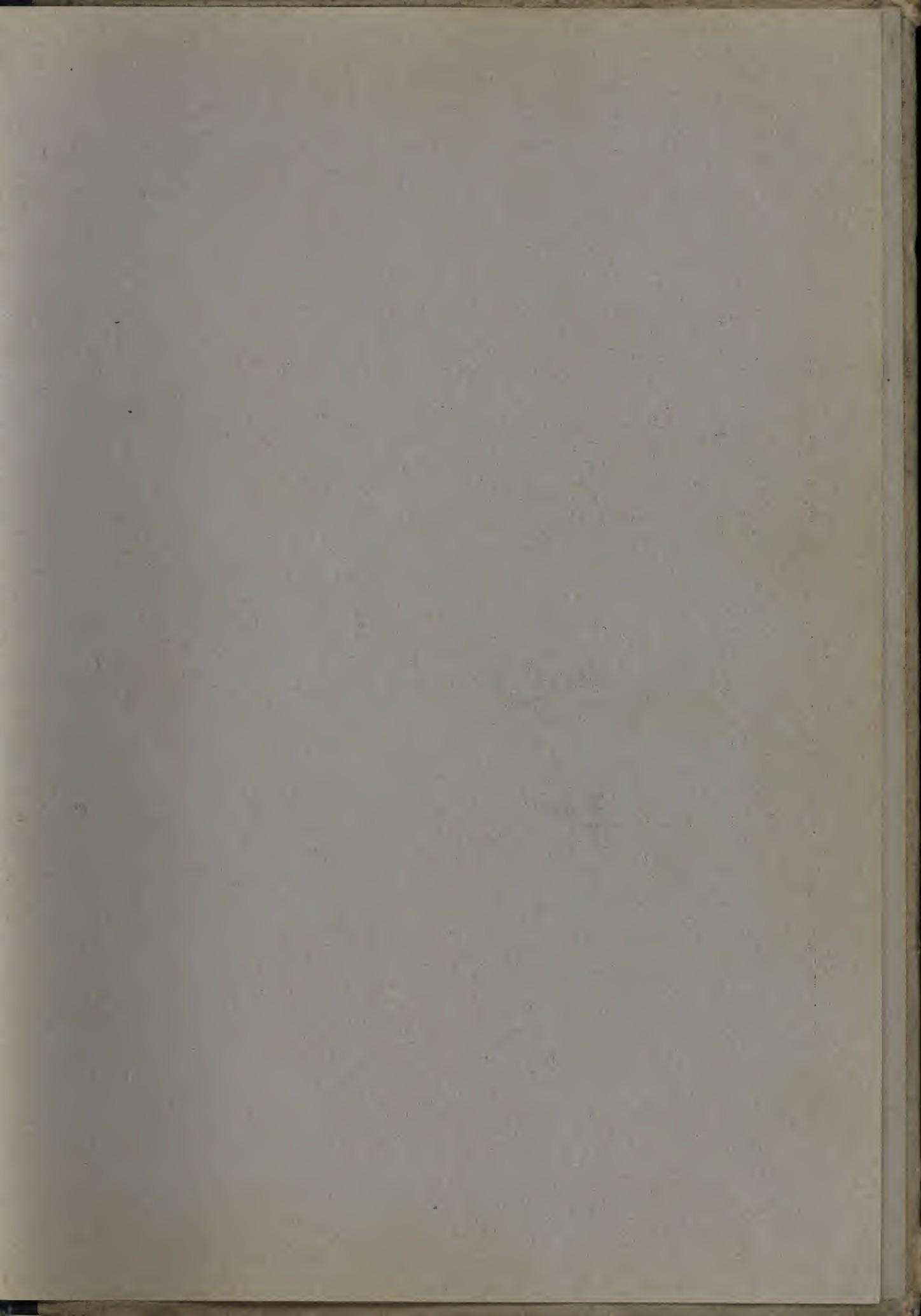
*Not shown in cut



Excelsior Stove & Manufacturing Company

We issue a Special Catalogue showing our line of Refrigerators, Ice Chests, Gas Stoves, Gasoline Stoves, Blue Flame Oil Stoves, Stove Repairs, Hardware Specialties, etc. Write for Catalogue and Prices.









CYCLOIDAL
NATIONAL
FURNACES



BURN THE SOOT AND SMOKE
AND
HEAT LIKE THE SUN